

P
Sci
C

2 7 07

Box

THE CHICAGO ACADEMY OF SCIENCES

The Birds of the Chicago Area

BY

FRANK MORLEY WOODRUFF

BULLETIN No. VI

OF

THE NATURAL HISTORY SURVEY

ISSUED APRIL 15, 1907

PRINTED BY
JENNINGS & GRAHAM
CHICAGO



SAND DUNE REGION AT MILLER, INDIANA; LOOKING NORTH. PHOTOGRAPHED BY MR. F. M. WOODRUFF.

THE CHICAGO ACADEMY OF SCIENCES

The Birds of the Chicago Area

BY

FRANK MORLEY WOODRUFF

BULLETIN No. VI

OF

THE NATURAL HISTORY SURVEY

ISSUED APRIL 15, 1907

ERRATA.

- Page 9, 20th line, for Hamnig read Hannig.
Page 9, 22d line, for Widman read Widmann.
Page 19, 3rd line from bottom, for *Fregato* read *Fregata*.
Page 28, 13th line, for Pomaine read Pomarine.
Page 34, 19th line, for Phalacrocorocidæ read Phalacrocoracidae.
Page 38, 16th line, for McKay read MacKay.
Page 38, 34th line, for *ameriacana* read *americana*.
Page 38, 3rd foot-note, for XIII, 1896, read XII, 1895.
Page 63, 28th line, for Steganoyus read Steganopus.
Page 72, 4th line from bottom, for Viellot read Vieillot.
Page 109, 32d line, for abundantly read sparingly.
Page 130, 21st line, for Acantsis read Acanthis.
Page 138, 10th line, take out the word breeding.
Page 147, 8th line, for Viellot read Vieillot.
Page 147, 4th line from bottom should read, The Summer
Tanager breeds throughout its United States.
Page 152, 3rd line, for Vieilot read Vieillot.
Page 155, 30th line, for Vells read Bell's.
Page 171, 26th line, for Sciurus read Seiurus.
Page 172, take out two bottom lines.
Page 202, under HOUGH, E., "Chicago and the West" should
be credited as a department in "Forest and Stream."

LETTER OF TRANSMITTAL.

CHICAGO, ILL., October 1, 1906.

DEAR SIR:

By direction of the Board of Managers of The Natural History Survey of The Chicago Academy of Sciences, I herewith submit to you for publication a report, to be issued, under the rules of the Academy governing such matters, as Bulletin No. VI, on The Birds of the Chicago Area, prepared by Frank Morley Woodruff of the Academy staff.

Respectfully,

WILLIAM K. HIGLEY,

Chairman.

TO THOMAS C. CHAMBERLIN,

President of The Chicago Academy of Sciences.

The Board of Managers of The Natural History Survey of
The Chicago Academy of Sciences:

WILLIAM K. HIGLEY, *Chairman.*

CHARLES S. RADDEN, *Secretary.*

THOMAS C. CHAMBERLIN.

GAYTON A. DOUGLASS

STUART WELLER.

THE NATURAL HISTORY SURVEY.

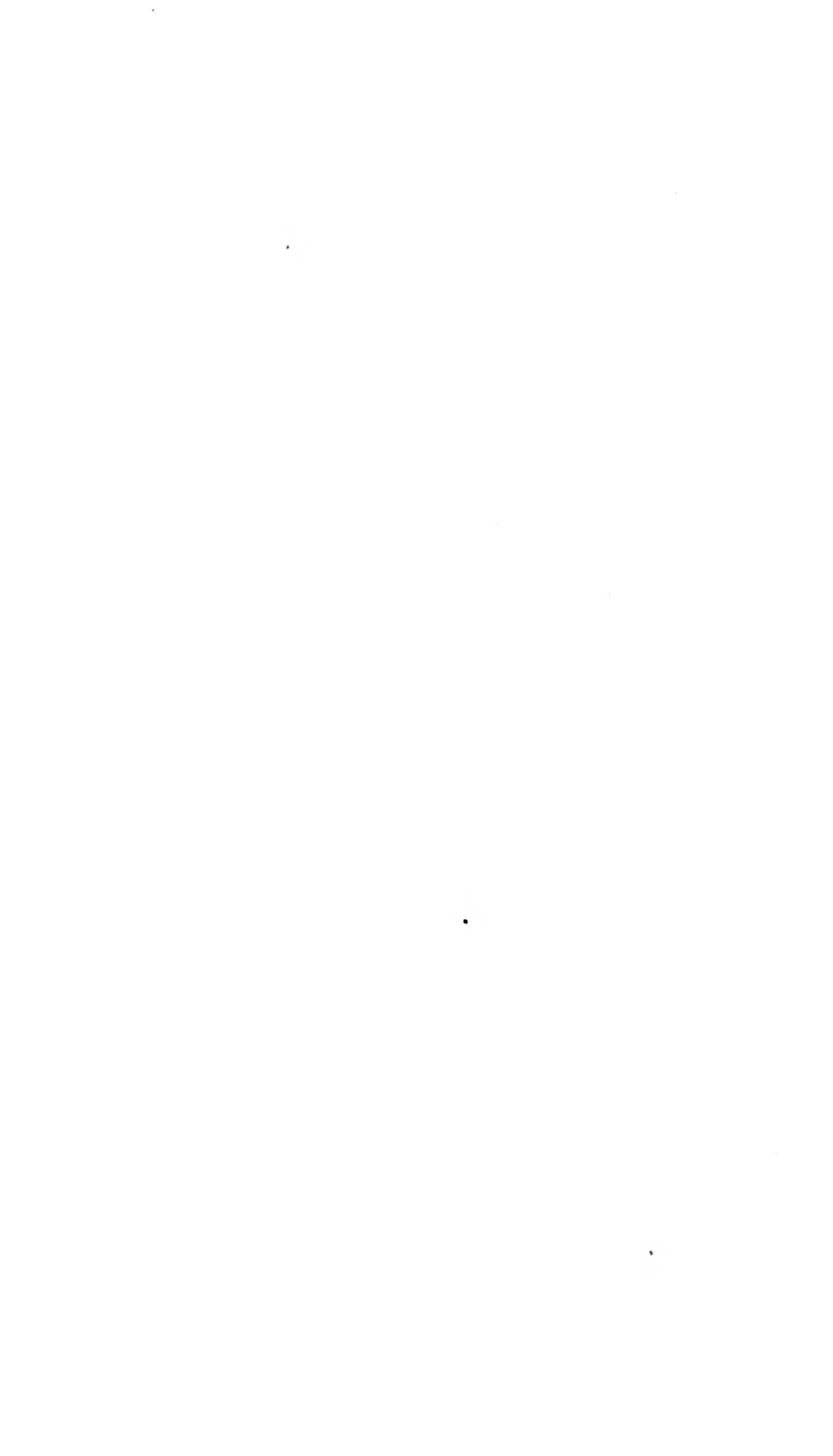
The Board of Managers of The Natural History Survey takes pleasure in presenting the sixth of its publications. It is the second relating to the fauna of the area and is devoted to the Birds of Chicago and vicinity.

The Chicago Area includes all of Cook and Du Page Counties, the nine north townships of Will County and a portion of Lake County, Indiana. This territory is about fifty miles square and is very varied in character, consisting of numerous swamps, lakes, creeks and rivers, besides a considerable forest-covered area.

It is a notable avifaunal locality, since it lies on the border between the eastern and western ranges of many species, where much intergradation occurs. It is also notable as being in the path of the Mississippi Valley migration, which accounts in a large measure for the number of species recorded and also for their individual abundance.

This report has been prepared by Mr. Frank Morley Woodruff, Assistant to the Curator of the Academy, who has devoted many years to the study of the avian life of the vicinity of Chicago. Mr. Woodruff has enlisted the aid of all local ornithologists, besides some residing at a greater distance, and the Board wishes to express its appreciation of their valuable assistance, acknowledgement of which has been made by Mr. Woodruff in the text.

Finally, it is again a pleasure to make mention of the patrons of The Natural History Survey, whose generosity has tended so much to its success and enables the Survey to make another contribution to the advancement of Science.



CONTENTS.

	PAGE
Introduction	9
Territory.....	10
Climatic Influences.....	11
Localities of Interest	15
Some Existing Conditions Opposed to the Birds	17
Extralimital Birds	19
Migration of the Birds.....	23
Classification.....	24
Catalogue of Species	25
Order Pygopodes; Diving Birds.....	25
Order Longipennes; Long-winged Swimmers.....	28
Order Steganopodes; Totipalmate Swimmers.....	34
Order Anseres; Lamellirostral Swimmers	35
Order Herodiones; Herons, Storks, etc.....	53
Order Paludicolæ; Cranes, Rails, etc.	56
Order Limicolæ; Shore Birds	62
Order Gallinæ; Gallinaceous Birds.....	82
Order Columbæ; Pigeons, Doves.....	86
Order Raptores; Birds of Prey.....	90
Order Psittaci; Parrots and Paroquets	108
Order Coccyges; Cuckoos, Kingfishers.....	108
Order Pici; Woodpeckers.....	109
Order Macrochires; Goatsuckers, Swifts, etc.	113
Order Passeres; Perching Birds.....	115
Bibliography	196
Index to Scientific Names	207
Index to Popular Names	214

INTRODUCTION.

In accordance with the request of the Board of Managers of The Natural History Survey of The Chicago Academy of Sciences, I have prepared the following annotated catalogue of the birds which have been taken or are positively known to occur within the limits of our region. I am especially under obligation for assistance to Mr. J. Grafton Parker, of Chicago, who has been my almost constant companion in the work of the field. Mr. Parker has the most exhaustive notes and the most extensive collection of birds from our area that I know of. I am also indebted to the following persons, who have furnished many valuable notes and suggestions: Mr. B. T. Gault, of Glen Ellyn, a very careful observer who furnished many valuable notes from the northern section of Illinois; Mr. Robert Ridgway, Curator of Birds at the Smithsonian Institution, Washington; Dr. J. A. Allen, of the American Museum of Natural History, New York; Mr. Eliot Blackwelder, of the State University, Madison, Wisconsin; Dr. Claude Tollman, Mr. Ruthven Deane, Mrs. Agnes Chase, Mr. John F. Ferry, Mr. O. M. Schantz, Mr. F. S. Dayton, Mr. Herbert E. Walter, Miss Amalie Hammig and Mr. Edward B. Clark, of Chicago; Professor S. A. Forbes, State University, Champaign, Illinois; Mr. A. W. Butler, Indianapolis, Indiana; Mr. Otto Widman, Old Orchard, Missouri, and Mr. Frank C. Baker, Curator of The Chicago Academy of Sciences. My thanks are due to Mr. Alexander C. Patterson for the use of a number of photographs of the Chicago Area.

I am especially indebted to Professor William K. Higley, Secretary of The Chicago Academy of Sciences, who has very kindly edited the manuscript, and has also rendered very valuable assistance in compiling the bibliography. Through the kindness of Mr. George H. Laffin my own collection of birds, made during several years of work in the fields of our area, is now in the Museum of the Academy.

The popular synonyms, which are of considerable importance, while obtained from many sources, have been largely taken from Dr. Ridgway's valuable report on the birds of Illinois, published by the State under the title "The Ornithology of Illinois."

In 1876 Mr. E. W. Nelson published his observations of the birds of our area. These notes appeared in the Bulletin of the Essex Institute, Volume VIII, 1876, under the title "Birds of Northeastern Illinois." Unless otherwise stated all references to the observations of Mr. Nelson are quoted from this report.

Another valuable work, which covers a part of our area, is "The Birds of Indiana," by Mr. Amos W. Butler, and published by the state of Indiana as the Twenty-second Annual Report of "The Department of Geology and Natural Resources."

TERRITORY.

The territory covered by the Survey includes all of Cook and Du Page Counties, the nine north townships of Will County and the northern portion of Lake County, Indiana. In the southeastern portion of this area there are numerous lakes and streams which drain into Lake Michigan and form what is known as the Calumet Region. In this region lying between the Little Calumet River and Lake Michigan, chiefly in Indiana, are the sand-hills or dunes, some of which, northeast of Millers, Lake County, Indiana, reach a height of nearly 150 feet above the Lake. Some of these dunes and sand ridges are bare, but others, especially those further back from the Lake, are more or less covered with a scanty growth of black oak, northern scrub pine (*Pinus banksiana*), white pine of a stunted growth, and various shrubs and herbs which can live in a sandy soil. Interspersed among these sand hills are quite a number of small marshes which in years past formed the favorite breeding places of such water-fowl as the Blue-winged Teal (*Querquedula discors*), the Wood Duck (*Aix sponsa*), and the Hooded Merganser (*Lophodytes cucullatus*). On the hills above several species of hawks and the Bald Eagles are known to nest. During the year 1897 two pairs of Bald Eagles raised their young near Millers, Indiana, almost in sight of the city of Chicago. Owing to the draining of the Calumet Region nearly all of the smaller lakes have disappeared. Towns have sprung up around all of the larger lakes of the region, such as Calumet, George and Wolf lakes, and the study of such birds as the American Egret, Canvas-back Duck, and birds of similar habits in this region is already a thing of the past. The drainage in the western portion of the area, which this report covers, is toward the Mississippi River, which the water finally reaches by passage through the Desplaines and

Illinois rivers. This region of our area is much higher and its influence is shown very plainly among certain varieties of bird life. The Great Blue Heron nests in great numbers in the tall timber along the more secluded portions of the Desplaines River, while only a very few are to be found in the Calumet Region. Most of our records of Short-billed Marsh Wrens, Cerulean Warblers, Yellow-throated Vireos, Lark Sparrows, hawks, owls and other birds show that a very large number of species prefer the former region, along the Desplaines River. In this region the land is more heavily timbered and there are also tracts of rich prairies and pastures. The altitude of Du Page County is much higher, as a whole, than that of the Calumet Region and a large portion is quite heavily timbered. This is just such an area as is enjoyed by many birds. Directly east of this region, along Lake Michigan, we find deep ravines which afford shelter to many of our birds during migration. The city of Chicago, and Calumet, Hyde, Wolf and George lakes lie in the center of this great basin formed by the areas just described. This tract is but slightly above the level of Lake Michigan.

CLIMATIC INFLUENCES.

The fact that Chicago has a greater per centum of lake winds than any other station on the Great Lakes, as may be seen by consulting the charts of the United States Signal Service, may account for the large number of northern and maritime species of birds in which, during the migration periods, this region is particularly rich. I will quote from Mr. E. W. Nelson's excellent report on the climate of this area. He says: "Not only is the influence of the Lake upon the fauna shown by the occurrence of numerous species of birds, attracted by the presence of a large body of water with its congenial surroundings, but the influence of the Lake upon the climate and the vegetation in its immediate vicinity, has a marked influence upon the list of summer residents.

"As is well known, the country bordering upon the Great Lakes has an average lower temperature during the summer, and a higher temperature during the winter, than the surrounding districts. This has a decided effect upon the movements and distribution of the birds in the vicinity of these large bodies of water. This influence is shown in a retardation, often of a week or more, in the spring migration, and in the scarcity of

small woodland species during the breeding season. Although birds are exceedingly numerous here during the migrations, and the number of species found during summer compares favorably with the number found at the same season in other localities having the same latitude, they are represented by decidedly few individuals. This fact is especially noticeable after one has passed a day in the marshes of the vicinity, where the abundance of numerous marsh and water birds, both in species and individuals, would lead one to suppose the woods were equally favored."

In connection with the study of the birds of this area, the statement of Professor Henry J. Cox, Weather Forecaster of this district is very interesting and useful. He says: "The climate of Chicago is quite variable, as is characteristic of places situated in the temperate zone, especially in the interior of the United States. The extreme range of temperature during the past thirty-three years has been 129 degrees, from a maximum of 103 degrees to a minimum of 26 degrees below zero. This variation, however, is not as great as what usually takes place in other sections of the Northern States. Located as it is at the southern end of Lake Michigan, the extreme heat of summer and cold of winter are tempered by the waters bordering the city. * * * In winter the influence of the Lake on the temperature is also very great in producing equable conditions. The extreme records in the interior are not approached along its shores."

Professor Cox also says that this "area is not in the course of any regular storm track, generally merely being on the edges of the storms that pass to the north over Lake Superior or to the storms that pass to the south over the Ohio valley. The prevailing direction of the wind is southwest, for the year as a whole. During the spring and early summer the wind is mostly northeast." There are, however, at times brisk and sometimes strong winds which are more beneficial than objectionable. These conditions of weather are far from objectionable to the birds, at least during their migrations. The area is also one that is seldom visited by droughts or by protracted rain periods. Especially pleasant weather in the autumn is one of the strong points of this region, and is especially favorable to the fall migration of the birds. "It is the time of the year when rain is least needed and when but little falls. It is the time of protracted sunshine and delightful weather." It is not at all strange that so

many species of birds select this area as a route for their migrations, when every condition is so favorable to their needs.

Occasionally, however, our area has had changes of temperature or other weather conditions which have been very severe for bird life at times. The destruction of the more delicate of our smaller birds during the spring migration period by a sudden dropping of the temperature, high northeasterly winds and cold rain storms, sometimes occurs. This may account for the scarcity of certain species some years when during the previous year they may have been common. This destruction from natural causes is well explained by the observations of Dr. Joseph L. Hancock.* He says: "Usually at this time of year (May 20) the small land birds have passed us on their northward migration, but this spring (1888) the weather has been so unfavorable that they have been much delayed, the Warblers, especially, and have suffered great loss of life.

"While it is usual to see many of these birds passing from tree to tree in the city, this spring on May 12 they were observed in great numbers scattered over the ground in open lots, and on the larger prairies within the city. Many were likewise noticed in the thronged thoroughfares in the business part of the town where some were run down by passing vehicles, and others met their death under the feet of pedestrians. They would permit a close approach, but when almost stepped upon would make a spasmodic effort to mount into the air, only to find themselves dropping back to the ground again, helpless, weak, and benumbed by the cold. This strange effect of the weather on the birds extended over many miles of country and across Lake Michigan to the east. The shores between Lake Forest, Evanston, and Chicago were bestrewn with lifeless birds which had been washed up by the waves." Dr. Hancock found that many species of birds were profoundly affected by the weather, allowing approach which would be next to impossible under ordinary conditions. He says the warblers could easily have been taken in a small hand net.

The destruction of bird life through the changes of temperature is very great, and often accounts for the scarcity of certain birds or the change of their route of migration during some years. The effect of severe weather which destroyed countless hundreds of bluebirds in 1895 is splendidly described by Mr. Otto Widman,

*Auk. Vol. V, 1888, 432-433.

of Old Orchard, Missouri, in a letter to me, dated July 4, 1895. He says: "The greatest enemy of bird life in winter is neither cold nor snow, but rain. That is, rain which falls at a momentary rise of temperature preceded and followed by low temperature. Such a misty, drizzling rain coming in contact with a cold surface congeals immediately and incases every object from the smallest blades of grass to the top of the highest trees.

"Fortunately these rains do not occur every winter, and when they do, they are usually soon followed by warm or moderately cold weather. I suppose that every bird can fast a few days, if in good condition, and if the temperature is not unusually low. Such a rain occurred on Friday, January 25, 1895. The temperature on the twenty-fourth was as low as six degrees with a raw northeast wind. During the night the temperature rose to twenty-six degrees when it began to rain. In the afternoon the rain turned into snow and at five o'clock a high wind of forty-eight miles an hour set in with rapidly falling temperature. This storm inaugurated an era of three weeks of unrelenting severity. For eight days everything remained buried under ice and snow, and the air was so cold that the sun's strongest rays could not melt the ice from the most exposed surfaces. It might be supposed that birds like bluebirds and robins would start and go south at the very outset of such a glaciation. This is not the case. They brave the adversity; they know they have successfully gone through severe trials of a similar nature. They wait. Not having visited their haunts during the cold spell, I have not seen any bluebirds after the twenty-third of January, but robins visiting the orchards in my neighborhood were seen nearly every day, even on the very coldest, the eighth of February, when the temperature at our place was as low as twenty degrees below zero. But even if they had gone further south a similar state of affairs would have confronted them everywhere. The whole of the southern states were one vast sheet of ice and snow for many days, and even when provided with food birds may succumb to the effect of low temperature at times of rain or deep snow. I am feeding the birds around my house every winter with broken hickory and walnut meats, grain and pork, still nearly every winter some of my boarders lose their lives through freezing. Even the imported sparrows freeze in their warm nests. A Carolina Chickadee was picked up early one morning as it fell from a tree, dead. A Tufted Titmouse and a nuthatch were

also found after a cold spell. The only sapsucker which stayed with me last winter and tapped the sugar maples successfully as early as New Year's day, succumbed to the cold on the tenth of February. Of the vast number of birds that perished in the woods and fields we shall never hear, because in such hard times the hungry eyes of beasts and birds of prey, of crows and shrikes, jays and others have found them long before man would get a chance. Still in the southern states, where bluebirds had already taken up their holes, the instances where dead bluebirds have been found by man are on record. Mrs. Stephenson of Helena, Arkansas, wrote me of several cases which came to her knowledge.

"Besides the Bluebirds and Robins several species seemed to have suffered great losses. In the first place the Myrtle Warbler. The yield of favorite berries, wild grapes and poison ivy being great, numbers of the birds remained in our woods. Hundreds were seen in our tract as late as the twentieth of January. When spring migrants came very few passed through here."

I quote from Mr. Widman's letter fully for it well illustrates the reason why in the spring of some years the migration of certain species seems far too small in the more northern states.

LOCALITIES OF INTEREST.

An unusually rich field for the study of maritime species and occasional visitors from the far north is in the vicinity of Millers, Indiana, about thirty miles southeast of Chicago, and within the limits of our area. (See plate I and frontispiece). This locality is near the southern end of Lake Michigan. Here may be seen, particularly during the fall migration, such species as the Glaucous Gull (*Larus glaucus*), the Kittiwake (*Rissa tridactyla*), the Caspian Tern (*Sterna caspia*), the Dowitcher (*Macrorhamphus griseus*), the Knot (*Tringa canutus*), the Purple Sandpiper (*Arquatella maritima*), the Baird's Sandpiper (*Actodromas bairdii*), the Sanderling (*Calidris arenaria*), the Willet (*Symphemia semipalmata*), the Black-bellied Plover (*Squatarola squatarola*), the Semipalmated Plover (*Ægialitis semipalmata*), and the Turnstone (*Arenaria interpres*).

On the rich meadows in the western portion of Cook County, in the vicinity of Worth Township, may be found resident such species as Henslow's Sparrow (*Ammodramus henslowii*), Grasshopper Sparrow (*Coturniculus savannarum passerinus*), Lark Sparrow (*Chondestes grammacus*), and during migrations Le-

conte's Sparrow (*Ammodramus leconteii*), Smith's Longspur (*Calcarius pictus*), Lapland Longspur (*Calcarius lapponicus*), and others.

An especially good field for studying the warblers during their migrations is in the higher timbered region of DuPage County, in the northern portion of our area. Here we also have as summer residents the Warbling Vireo (*Vireo gilvus*), the Yellow-throated Vireo (*Vireo flavifrons*), and the Black-throated Blue Warbler (*Dendroica ceruleascens*). While about the region of Chicago with its chains of lakes divided by long ridges of timber may be found all of our more common forms of bird life in abundance.

The fine city parks of Chicago are the most favorable localities in which the birds may be studied with a field glass. The wooded island in Jackson Park is an excellent place for the study of the water loving passerines, such as the Prothonotary Warbler, Water Thrushes and Swamp Sparrows. Lincoln Park (see plate II) one and one-half miles long, bordering on Lake Michigan, with its lagoons and lakes, numerous wooded knolls and hills, is a wonderfully attractive locality for the study of birds. On September 18, 1894, in one small patch of bushes near the greenhouse, I found twelve specimens of the Connecticut Warbler.

To show what an excellent locality Lincoln Park is for the study of birds I desire to call attention to the work of Professor Herbert Eugene Walter, of the Robert A. Waller High School, in Chicago, who published a little book, "Wild Birds in City Parks." This valuable little work consists of hints on the identifying of 145 birds, which he has observed and studied during the spring migrations in Lincoln Park. The object of this book is to furnish those who may be interested in making the acquaintance of wild birds with a simple letter of introduction to these birds, the majority of which are commonly seen during the spring migration.

It would be a difficult matter to find a more interesting and fertile field for the study of birds than our area. The great wooded region north of us; Lake Michigan on the east; the desolate sandy southern portion, somewhat resembling the western plains and upon which there are found growing quite a number of western plants and the prickly pear cactus (*Opuntia rafinesquii*), the whole area forming an attraction for birds which favor such localities. What greater inducements could be offered birds to visit our area during their migrations, for south and west of us

there are rich broad fields with ridges of timber, and several large rivers, the Illinois, the Ohio, and the Mississippi, which tend to lead the birds to us. Combining as we do, to a greater or less extent, the characteristics of the western plains, the southern swamps, and the eastern characteristics as well as boreal effects, many Arctic and maritime species are found at times within our limits.

Then again a large portion of our area, lying in a great basin formed by the old lake beaches and the wooded hills of Lake and DuPage Counties, the temperature influenced by that of Lake Michigan, forms what might be called a wind harbor causing at times a perfect deluge of migrating birds. Several times in the past twelve or more years such birds as the Painted Longspurs and Snowflakes, birds which only casually visit us, have appeared in countless numbers and have stayed with us often as late as the seventh of May. I obtained specimens of Smith's Longspur (*Calcarius pictus*) in almost full breeding plumage on the fifth of May, 1896.

During especially severe winters a number of northern species, such as Crossbills, Bohemian Waxwings, and Evening Grosbeaks, arrive in large numbers to spend several weeks in our climate, which seems to be an attraction for them. Much more time is spent by these birds with us, apparently, than in the regions lying outside of our area. I believe that the reason for this is the temperate basin, which I have spoken of as a wind harbor, and the influences of Lake Michigan.

SOME EXISTING CONDITIONS OPPOSED TO THE BIRDS.

As our territory becomes more thickly populated each year, the struggle for existence among our wild birds to remain and breed in their old haunts is really pitiful. The most secluded spots on our smaller streams and marshes are often fairly crowded with the nests of the poor birds which in years past were spread over a large territory. If the unscrupulous collectors are not restrained the species which I mention below will disappear entirely from our area. In 1891, hundreds of Black Terns (*Hydrochelidon nigra surinamensis*) nested along the shores of Calumet Lake, Hyde Lake, and the feeders of the Desplaines River. Today it would be difficult to find one of these birds nesting

within our area. The Wilson's Phalarope (*Steganopus tricolor*), the most interesting and curious of our Limicolæ, have been shot and practically driven from our area through the persecution of Chicago sportsmen and egg-hunters. The same condition exists with the Woodcock (*Philohela minor*), the birds being driven into several small areas and the nests robbed. In 1890, I hunted in vain for the Pied-billed Grebes (*Podilymbus podiceps*) which I expected to find nesting on the borders of the lakes of our area, and finally I was surprised, while roving along the shore of a small creek which flows into the Desplaines River, to find a large colony of these grebes nesting in a small, reedy patch of meadow. This was a very unusual occurrence in the nesting habits of these birds within our area, but was easily explained, for they had been driven from all other suitable localities. I counted seven nests within a space fifty feet square. I found the same condition of affairs existing in the habits of the Florida Gallinules and the King Rails. I mention these facts hoping that these conditions will influence every student of bird life to use his efforts to stop all unnecessary destruction of our native birds. On August 1, 1897, I found two pairs of Belted Piping Plover (*Ægialitis meloda circumcincta*) nesting on the lake shore. One family of five was destroyed by collectors, as this species had not been reported for years and was supposed to have been of accidental occurrence until the young of this pair were found. By asking the assistance of the fishermen on the beach in an attempt to protect the balance of the birds, the remaining pair successfully raised their young. At the present date, there are probably twenty pairs or so nesting, during the breeding season, within our area, but as their eggs command a high price and the majority of the collectors are indifferent, we may soon expect to have this fine bird disappear from our region.

Our bird fauna has differed surprisingly little during the past twenty years. The most marked variation, perhaps, has been among the Arctic species of gulls and ducks. In 1876 the Eider Ducks, the Scoters, the Glaucous Gulls, the Franklin's Gulls and other birds of a similar nature, were of common occurrence. They are, however, much less common at the present time. I can only account for this condition by the fact of the largely increased number of hunters. Many of the sportsmen of our city, who seemingly cannot wait for the regular hunting season, shoot great numbers of the Old Squaw Ducks, Scoters,

and Red-breasted Mergansers or Sheldrakes, all of which are totally unfit for food. As this is probably done along the shores of the entire group of lakes in the northern United States, it is evident that most of our rare winter visitants are shot before they can reach us, or are possibly forced to seek other localities which seem safer to them. I know of one gentleman, an enthusiastic sportsman, who shot sixty-four Old Squaw Ducks from the government pier in Chicago, thinking they were Pintails or some other edible ducks. He cheerfully presented some of them to friends, who of course had to throw them away. As these ducks are useful scavengers, and of as great value to us as the Turkey Vulture and the sea gulls, they should not be shot in this manner. It is because of this needless slaughter of birds that the Ivory-billed Woodpecker, the Carolina Paroquet, the Eskimo Curlew, the Passenger Pigeon, and the Wild Turkey have disappeared forever from the localities which they formerly frequented.

EXTRALIMITAL BIRDS.

In a locality situated as our area is on the shore of a large body of water, it is very important that we should always have in mind the possibility of birds appearing within our limits which are truly extralimital. Mr. E. W. Nelson has well expressed the peculiar situation of this area, and his words so well show its nature that I will quote them: "The region about the southern end of Lake Michigan, in Illinois, presents an unusually fertile field for the ornithologist. Situated, as it is, midway between the wooded region of the East and the treeless plains of the West, with the warm river bottoms of the South, rich in southern species, extending within a comparatively short distance, and the Great Lakes upon the north, Northeastern Illinois forms a kind of 'four corners' where the avian-faunæ of four regions intergrade. To the proximity of Lake Michigan we are indebted for a number of more or less strictly maritime species." From the action of fierce storms raging inland from the sea coast, and the occurrence of many maritime species, which have been seen and taken just out of the boundaries of our area, such as Brunnich's Murre (*Uria lomvia*), Burgomaster Gull (*Larus glaucus*), Man-o'-War Bird (*Fregata aquila*), we are liable in time to find a number of our sea coast birds, along the chain of Great Lakes. As a special illustration of this fact, I will speak of the occurrence of

the Man-o'-War Bird not far from our area. I quote from Mr. A. W. Butler's "Birds of Indiana" where he says: "In the fall of 1896 I saw, in the office of Mr. J. E. Beasley, the well known taxidermist, at Lebanon, Indiana, a nicely mounted specimen of a young male of this species. I learned it was killed near Shelbyville, Indiana, July 14, 1896, by Mr. W. S. Patterson, and came into Mr. Beasley's hands for preservation the next day." A record of the finding of this species north of us is that of a specimen in the Milwaukee Public Museum, which was killed in the vicinity of Humbolt, Wisconsin, a few miles north of Milwaukee, in August, 1880. I believe that especial interest should be taken in our extralimital species, as I find that the efforts of nearly all of our careful observers along this line have been successful, and have added during late years such birds as the Kittiwake Gull (*Rissa tridactyla*), Glaucous Gull (*Larus glaucus*), and the Caspian Tern (*Sterna caspia*), to our list of accidental visitants.

Mr. E. W. Nelson in his "Birds of Northeastern Illinois," names the following birds, which are extralimital to the region covered by this report, but have been observed or captured not far from our limits. A single specimen of Townsend's Solitaire (*Myadestes townsendii*) was obtained December 16, 1875, by Mr. Charles Douglas, at Waukegan. This bird was found in a sheltered ravine near the lake shore. Dr. Hoy observed a small flock of the Hudsonian Chickadee (*Parus hudsonicus*) near Racine, Wisconsin, in January, 1852. The Worm-eating Warbler (*Helminthorus vermicorus*) Mr. Nelson speaks of as a very rare visitant and says a single specimen was observed May 21, 1876, at Waukegan. The Sycamore Warbler (*Dendroica dominica albilora*) Mr. Nelson gives as a very rare summer visitant from the south. The species was then known to be a common summer resident in the vicinity of Indianapolis, Indiana. The Intermediate Sparrow, a variety of the White-crowned Sparrow, (*Zonotrichia leucophrys intermedia*) was found by Dr. Hoy near Racine. This far western bird was taken by him in April, 1871. The Golden-crowned Sparrow (*Zonotrichia coronata*), is another western bird taken by Dr. Hoy in his garden at Racine in April, 1858. The Canada Jay (*Perisoreus canadensis*) was taken by Dr. Hoy near Racine in the winter of 1859, and Mr. Nelson thinks this species may have been a regular winter visitant in the northern portion of Illinois before the pine forests along the lake shore were destroyed. The Wood Ibis (*Tantalus*

loculator) Mr. Nelson speaks of as "an exceedingly rare summer visitant from southern Illinois." He also says that Dr. Hoy has a specimen obtained at Racine, September 10, 1869. The Glossy Ibis (*Plegadis autumnalis*) Mr. Nelson speaks of as "a very rare visitant" and says that he knows of two or three instances of its occurrence in our vicinity. The Trumpeter Swan (*Olor buccinator*) Mr. Nelson thought occurred during its migration periods, and there is really no reason why it may not. The Greater Scaup Duck (*Aythya marila*) Mr. Nelson considered "a rare migrant." The Harlequin Duck (*Histrionicus histrionicus*) Mr. Nelson reports as a "rather rare winter resident upon Lake Michigan," and says that Dr. Hoy secured several specimens at Racine. The King Eider (*Somateria spectabilis*) Mr. Nelson speaks of as a "rare winter visitant—perhaps winter resident—to Lake Michigan and other parts of the State." It is known that its range includes Illinois. The Florida Cormorant (*Phalacrocorax dilophus floridanus*), which is known to be a summer resident in the southern portion of Illinois, Mr. Nelson states was observed at Waukegan in May, 1876. The White-winged or Iceland Gull (*Larus leucopterus*), and the Great Black-backed or Saddle-back Gull (*Larus marinus*) Mr. Nelson states are not uncommon winter residents on Lake Michigan. He also records Franklin's Gull (*Larus franklinii*) as a rare visitant to Lake Michigan, and that a specimen was obtained at Milwaukee in 1850. The Gull-billed Tern (*Gelochelidon nilotica*) Mr. Nelson records as "an exceedingly rare visitant during summer," and he also speaks of the Royal Tern (*Sterna maxima*) as being an exceedingly rare summer visitant to Lake Michigan. The Black-throated Loon (*Urinator arcticus*) Mr. Nelson records as "a very rare winter visitant upon Lake Michigan," and speaks of specimens as taken at Racine and Milwaukee. As this species is known to casually occur both in autumn and winter in the northern United States it is liable to be found within our region.

While Mr. Nelson's report covers a somewhat larger area than is included in this report, the limits of his area are only a very few miles beyond those of ours. The city of Racine, which he so frequently mentions, is about sixty-two miles north of Chicago, in Wisconsin very near the southern boundary of that state and on the shore of Lake Michigan. Waukegan, also frequently mentioned by Mr. Nelson, is located in Illinois and is thirty-six miles north of Chicago.

All persons who are interested in the study of birds within the limits of our region, should be watching for the following species which are liable to visit the area:

The Pomarine Jaeger (*Stercorarius pomarinus*) which is known to visit the Great Lakes in the winter.

The Parasitic Jaeger (*Stercorarius parasiticus*) which is known to have visited Lake Michigan in our vicinity during the winter.

The Cackling Goose (*Branta canadensis minima*), a small western species, has been observed in Wisconsin, Illinois and Michigan. These geese are Pacific coast birds, breeding in the far north and migrating southward in winter to California and sometimes eastward at least to the Mississippi Valley. I have taken five of these birds at Meredosia, Illinois.

The following species may also very rarely visit our area, as specimens have been taken near us or have been known to visit the Great Lakes:

Hudsonian Chickadee (*Parus hudsonicus*).

Water-thrush (*Seiurus noveboracensis*). This species was reported by Mr. Robert Kennicott, in his "Catalogue of Animals Observed in Cook County, Illinois." This was published during the year 1855, and since that time some of the birds then included under this specific name have been placed in a variety known as Grinnell's Water-thrush under the varietal name *notabilis*. As the variety has been known to frequent our area, I am inclined to think that the birds observed by Mr. Kennicott and others belong to this variety which was given its name in 1880, several years after the time of his investigations.

Canada Jay (*Perisoreus canadensis*), specimens of which were observed by Dr. Hoy in southern Wisconsin.

Iceland Gull (*Larus leucopterus*). This species is known to frequent the Great Lakes during the winter, and is also known to pass even further south.

King Eider (*Somateria spectabilis*) is known to occasionally visit the Great Lakes. It has also been reported from Iowa and northern Ohio.

The Ruff (*Paroncella pugnax*) has been recorded from English Lake, Indiana, by Mr. Ruthven Deane (Auk, XXII, October, 1905, p. 410) and should be looked for among the shore birds which visit our lakes.

MIGRATION OF THE BIRDS.

Of the migration of the birds of our region, depending as it does almost entirely upon the weather conditions, little more can be said beyond the individual reports of arrival and departure. This is especially true of the insect-feeding birds which are very sensitive and deeply feel all sudden changes of temperature. They are "perfect barometers in that respect." Some years the migration of the birds is greatly impeded by severe or variable weather, and in these years quite large numbers of migrant birds have been destroyed by sudden changes to cold and stormy weather from a fair and warmer atmosphere, which has attracted the birds. The interesting Bluebirds appear usually about the middle of March, but it was my pleasure to observe one as early as February 22, and Mr. Benjamin T. Gault heard one calling at Glen Ellyn, not far west of Chicago, on February 28, 1896.

The height of migration of the Passeres in our area seems to be from the first to the tenth of May in the spring, and about the middle of September in the fall. It will be of interest to note the height of migration during eight years, from 1893 to 1900, as recorded by Mr. Gault at Glen Ellyn, Illinois. His record is as follows, and is the result of his observations of the vireos, the warblers, and the smaller thrushes used as an index or basis to mark the height of the spring migration season:

1893.....	May 12 to 14 inclusive
1894.....	May 14 to 16 inclusive
1895.....	May 19 to 23 inclusive
1896.....	May 6 to 12 inclusive
1897.....	May 8 to 15 inclusive
1898.....	May 13 to 20 inclusive
1899.....	May 11 to 19 inclusive
1900.....	May 15 to 19 inclusive

The maritime birds straggle through our area in the spring from April to June. It is a rather strange fact that late in May and in June there may sometimes be seen large flocks of Red-backed Sandpipers (*Pelidna alpina sakhalina*), Black-bellied Plovers (*Squatarola squatarola*), the Knot or Robin Snipe (*Tringa canutus*), the Least Sandpiper (*Actodromas minutilla*), and the Semipalmated Sandpiper (*Ereunetes pusillus*) along the shores of our smaller lakes. Whether these birds are simply

late migrants, or those which do not intend to nest in the north it seems difficult to state.

CLASSIFICATION.

The classification adopted for this catalogue is that of the American Ornithologists' Union Check-list, with such additions and corrections as have been published from time to time in the "Auk." My thanks are due to Mr. J. A. Allen, Curator of the Department of Mammalogy and Ornithology of the American Museum of Natural History, New York City, for assistance in correcting the classification of certain species.

Mr. Robert Ridgway's magnificent work on the Birds of North and Middle America has not been available as a basis for classification as its publication is unfinished; and also for the reason that the sweeping changes in nomenclature in that monumental work might lessen the value of a purely local catalogue. A number of changes in specific and generic names, however, have been adopted from Mr. Ridgway's work.

CATALOGUE OF SPECIES.

ORDER PYGOPODES: DIVING BIRDS.

FAMILY PODICIPIDÆ: GREBES.

Genus **COLYMBUS** Linnæus, 1758.**Colymbus holboëllii** (Reinh.). **Holboëll's Grebe.***Podiceps rubricollis* NUTTALL, Mammal, II, 1834, 253.*Podiceps holboëllii* REINH., Vid. Meddel, 1853, 76.*Podiceps griseigena* var. *holboëlli* NELSON, Bull. Essex Institute, Vol. VIII, 1876, 150.*Podiceps griseigena* var. *holboëllii* COUES, Key, 1872, 337.*Colymbus holboëllii* RIDGWAY, Water B. N. Amer., II, 1884, 428.

Popular synonyms: AMERICAN RED-NECKED GREBE. COOPER'S GREBE.

The only record that I have found of the occurrence of Holboëll's Grebe within our limits is that of Mr. E. W. Nelson, who says*: "Rather uncommon winter resident upon Lake Michigan." Mr. Ridgway says† that it is a winter visitant to Illinois. This being the case it would naturally appear upon the lake border of our district.

The range of this grebe is North America in general, including Greenland. It breeds from Minnesota and Maine northward and migrates, in winter, southward quite through the United States. It is also a native of eastern Siberia, southward to Japan.

Colymbus auritus Linnæus. **Horned Grebe.***Colymbus auritus* LINNÆUS, S. N., ed. 10, I, 1758, 135.*Podiceps cornutus* LATHAM, Ind. Orn., II, 1790, 783.

Popular synonyms: DUSKY GREBE. HELL-DIVER.

Mr. E. W. Nelson in his report on the Birds of Northeastern Illinois, states that in 1876 this species occurred casually from the first of October to the tenth of November and during April. He also states that it bred sparingly on the small lakes of this region. Mr. George L. Toppan has a specimen in the downy plumage, taken May 24, 1878, at Sheffield, Indiana. Mr. J. G.

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 150.

†Birds of Illinois, Vol. II, 1895, 260

Parker, Jr., obtained one specimen on April 1, 1890, from a flock of six at Grand Crossing. My own observations are as follows: Took one specimen of two, observed on Lake Calumet May 28, 1889, and one at Worth, Illinois, on September 18, 1889.

The above observations would appear to indicate that the Horned Grebe, which is exceedingly tame during its migrations, is very shy and retiring during the nesting period, as no breeding notes have been obtained since 1878 for this area. I also find that this species has been reported a great many times. Its range covers the northern hemisphere, and in North America it breeds in the northern United States and northward.

Colymbus nigricollis californicus (Heerm.). **American Eared Grebe.**

Podiceps auritus NUTTALL, Manual, II. 1834, 256.

Podiceps californicus HEERM., Proc., Acad. Nat. Sci. Philadelphia, 1854, 179.

Podiceps auritus var. *californicus* NELSON, Bull. Essex Institute, Vol. VIII, 1876, 151.

Colymbus nigricollis californicus RIDGWAY, Proc. U. S. Nat. Mus., VIII, 1885, 256.

Popular synonym: CALIFORNIA GREBE.

While the American Eared Grebe has been reported several times as occurring within our limits, I have not been able to find a single record of an authentic specimen of this species having been taken. The only published record is that of Mr. E. W. Nelson, who says*: "Not uncommon in winter upon Lake Michigan. Several species of grebes and a number of ducks are occasionally taken during the winter upon the hooks, set several miles off shore by the fishermen."

The range of this grebe includes northern and western North America from the Mississippi Valley westward.

Genus **PODILYMBUS** Lesson, 1831.

Podilymbus podiceps (Linnaeus). **Pied-billed Grebe.**

Colymbus podiceps LINNÆUS, S. N., ed. 10, I, 1758, 136.

Podilymbus podiceps LAVER., in BAIRD, B. N. Amer., 1858, 898.

Popular synonyms: HELL-DIVER. DI-DAPPER. WATER WITCH. DAB-CHICK. CAROLINA GREBE.

A common summer resident, arriving the last of March and leaving in November. It nests abundantly with us on most of our small lakes. It is a bird of wide distribution, its range ex-

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 151.

tending from the British Provinces southward to Brazil, the Argentine Republic and Chili, and is also found in the West Indies and Bermuda. It breeds nearly throughout its range.

FAMILY GAVIDÆ: LOONS.

Genus **GAVIA** Forster, 1788.

Gavia imber (Gunnerus). Loon.

Colymbus imber GUNNERUS, Trondh. Selsk. Skr., 1. 1761, pl. iii.

Colymbus toquatus BRÜNN., Orn. Bor., 1764, 41.

Urinator imber STEJNEGER, Orn. Expl. Kamtsch., 1885, 313.

Gavia imber ALLEN, Auk, XIV, July, 1897, 312.

Popular synonyms: GREAT NORTHERN DIVER. WALLOON. GUINEA DUCK. HELL DIVER.

This species is resident and not uncommon. It is the largest and most active of our diving birds, and may be looked for at all times of the year. Mr. Robert Ridgway says, in his Birds of Illinois, that the Loon winters in the southern portion of the state. At times, this bird is caught in the gill nets of the lake fishermen. In diving, the Loon becomes entangled in the meshes of the net and is killed.

The Loon's range covers the northern part of the northern hemisphere, and in North America it breeds from the northern portion of the United States northward, and winters as far south as the Gulf of Mexico and Lower California.

It may be of interest to mention a set of eggs which I collected at Deer Lake, three miles from Hickory, Illinois, in May, 1892. The nest was on the end of a long piece of bog land which extended about seventy-five yards into the lake. The nest was a circular mass of decayed rushes, scraped together so as to prevent the eggs from rolling into the water.

Gavia lumme (Gunnerus). Red-throated Loon.

Colymbus lumme GUNNERUS, Trondh. Selsk. Skr., 1. 1761, pl. ii, fig. 2.

Colymbus septentrionalis LINNÆUS, S. N., ed. 10, 1, 1766, 220 (adult).

Urinator lumme STEJNEGER, Pr. U. S. National Museum, V, 1882, 43.

Popular synonym: RED-THROATED DIVER.

The Red-throated Loon seemingly can be admitted to the bird fauna of the Chicago Area only as a rare winter visitant. The only records that I can find of the taking of this species within our limits are those of three specimens, the dead bodies of which were found on the lake shore at Evanston, February 15, 1870. These specimens are now in the museum of the North-

western University at Evanston. Mr. H. K. Coale also reports the taking of a specimen at Chicago, February 23, 1885.

Mr. E. W. Nelson has reported the Red-throated Loon a common winter resident upon Lake Michigan in 1876. It has an extensive range which includes the northern part of the northern hemisphere. It migrates southward in winter nearly across the United States.

ORDER LONGIPENNES: LONG-WINGED SWIMMERS.

FAMILY STERCORARIIDÆ: THE SKUAS AND JAEGERES.

Genus **STERCORARIUS** Brisson, 1760.

Stercorarius pomarinus (Temm.). **Pomarine Jaeger.**

Larus pomarinus TEMM., Man. d'Orn., 1815, 514.

Stercorarius pomarinus VIEILLOT, Nouv. Dict., XXXII, 1819, 158.

Popular synonyms: GULL-CHASER. GULL-HUNTER.

Mr. E. W. Nelson, who records the only occurrences of this bird within our limits, says (Bulletin of the Nuttall Ornithological Club, July, 1876, p. 41): "From the description of a bird seen with a flock of gulls near Evanston, Illinois, by F. L. Rice of that place, and the account of a strange gull occasionally seen by a sportsman who does considerable shooting on Lake Michigan, I am certain this species is a rare visitant during severe winters." Mr. Nelson also reports seeing one of these birds on October 9, 1876, at Chicago. It was "a fine adult specimen flying along the Lake shore, and so near that there could be no possibility of mistake."*

It does not seem strange that this Jaeger might appear as a rare winter visitant on the waters of Lake Michigan, for its range includes the seas and inland waters of the northern portion of the northern hemisphere. In the winter, it migrates southward to Africa, Australia and from North America to South America.

Genus **RISSA** Stephens, 1825.

Rissa tridactyla (Linnæus). **Kittiwake.**

Larus tridactylus LINNÆUS, S. N., ed. 10, I, 1758, 136.

Rissa tridactyla BONAPARTE, Comp. List, 1838, 62.

Popular synonyms: WINTER GULL. KITTIWAKE GULL.

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 145.

The Kittiwake is a very rare winter visitant. Mr. E. W. Nelson observed it at Chicago, and he with Dr. P. R. Hoy report seeing it at Waukegan, Illinois. However, I can find no record of its capture prior to that of the specimen now in the museum of The Chicago Academy of Sciences. This specimen is a young bird which has the black patch on the lower part of the neck and the band on the tail well defined. The tail has a slightly forked appearance. It was shot by Mr. Chris. Wagner, and purchased for the Academy.

A gull supposed to be the Kittiwake has been observed on the lagoons of Jackson Park, Chicago, in the month of April, 1904.

While the visits of the Kittiwake are rare, it is quite apt to appear in our vicinity during especially severe winters. Its range includes the Arctic regions but in winter it passes southward to the Great Lakes.

Genus **LARUS** Linnæus, 1758.

Larus glaucus Brünn. **Glaucus Gull.**

Larus glaucus BRÜNN., Orn. Bor., 1764, 44.

Popular synonyms: BURGOMASTER. WHITE GULL. HUTCHIN'S GULL.

Mr. Robert Ridgway says that the Glaucous Gull is an Arctic bird which occasionally visits Lake Michigan in the winter. In the writer's collection there is a specimen in the pure white plumage of the second year which was captured at Millers, Indiana, August 8, 1897. When shot, the bird was alone and flying along the beach of Lake Michigan. Three specimens were also taken by Dr. P. R. Hoy several years ago at Racine, Wisconsin.

The Glaucous Gull is a bird of the Arctic regions which passes southward in winter to the Great Lakes and Long Island.

Larus argentatus Brünn. **Herring Gull.**

Larus argentatus BRÜNN., Orn. Bor., 1764, 44.

Larus smithsonianus COUES, Proc. Acad. Nat. Sci. Philadelphia, 1862, 296.

Larus argentatus var. *smithsonianus* COUES, Check List, 1873, no. 547a.

Larus argentatus argentatus COUES, B. of N. W., 1874, 625.

Popular synonyms: SEA GULL. GRAY GULL.

A common winter resident, arriving in November and remaining until May. They may be seen in company with the Ring-billed Gulls (*Larus delawarensis*) when the lake is quite frozen

over, searching for airholes where they may find a few dead fish upon which to feed.

Mr. E. W. Nelson in his "Birds of Northeastern Illinois" gives the following note under the name *Larus argentatus*, or the European Herring Gull: "A single specimen, an adult female, was obtained in the Chicago harbor March 27, 1876." This note is of considerable interest, for at that time the American Herring Gull was considered a variety (*Larus argentatus smithsonianus*) of the European species which was known in this country only as a very casual visitor to the Atlantic seacoast. Mr. Nelson also states that this specimen was examined by Dr. Coues and Mr. Ridgway, who pronounced it identical with the European bird. He says of the specimen: "The most striking peculiarity is its small size and the white terminal space over two inches long, upon the outer primary. Iris hazel." In the "Birds of Illinois" Mr. Ridgway says: "According to Mr. Nelson, the iris of this specimen was 'hazel.' If this was really the case (which there is no reason for doubting), the specimen can hardly have been *L. argentatus* in either of its forms, which, when adult (the bird in question was an adult female), always has the iris yellow. *L. californicus* has a dark brown or hazel iris, and it may possibly be that species; at any rate the case is one of considerable importance and the specimen should, if it can be traced, be carefully re-examined."

It is interesting to watch the flocks of gulls hovering near the outlets of the sewers along the lake-front in the city of Chicago. As the birds are never molested they are fearless and one can approach within a few yards of them, thus obtaining a splendid opportunity for determining the various species which form the flocks. In these flocks, I have only succeeded in finding three species. These were the Herring Gull, the Ring-billed Gull and the Bonaparte's Gull. In the spring, the Herring Gulls may be seen on many of our rivers and quite a distance inland, where they frequent the overflowed meadows, looking for fish which may have frozen during the winter and which lie dead upon the surface.

The geographical range of the Herring Gull quite covers the northern portion of the northern hemisphere. In North America, its breeding range extends from the northern portion of the United States northward, and it winters as far south as Cuba and Lower California.

Larus delawarensis Ord. **Ring-billed Gull.**

Larus delawarensis ORD, Guthrie's Geog., 2d Amer. ed., 1815, 319.

A common winter resident, staying in our vicinity from about the last of September until about April 29. This species is often confounded with the Herring Gull unless the two are seen together, when it will be noticed that the Ring-billed Gull is much the smaller of the two, and that the light greenish bill is crossed by a dark band near the tip.

This is a characteristic gull of North America; and in winter it may be seen as far south as Cuba and Mexico.

Larus philadelphia (Ord). **Bonaparte's Gull.**

Sterna philadelphia ORD, Guthrie's Geog., 2d Amer. ed., II, 1815, 319.

Larus Bonapartii NUTTALL, Manual, II, 1834, 294.

Larus philadelphia GRAY, List Brit. B., 1863, 235.

Popular synonyms: MOLLY GULL. SEA PIGEON.

A transient visitor in Cook County, arriving in April, when it stays but a short time. It returns again in September and remains with us until the middle of November. This beautiful and friendly little gull may be found on all of our large lakes, and at times the lagoons in Jackson and Lincoln parks will seem to be covered with them. The water at this time will be alive with immense schools of minnows, and the gulls while feeding dive after them, tern-like.

The range of Bonaparte's Gull extends over the whole of North America, though it seldom breeds south of the British Possessions.

Genus XEMA Leach, 1819.**Xema sabinii** (Sabine). **Sabine's Gull.**

Larus sabinii J. SAB., Trans. Linn. Soc., XII, 1818, 520, pl. 29.

Xema sabinii LEACH, App. Ross's Voy. Baffin's Bay &c. ed., 1819, lvii.

Xema sabinii LAWR. in BAIRD, B. N. Amer., 1858, 857.

Xema sabinii COUES, Proc. Acad. Nat. Sci. Philadelphia, 1862, 311.

Popular synonym: FORK-TAILED GULL.

The only record that I can find regarding the taking of this bird within the limits of our area is that of Mr. E. W. Nelson, who says: "While collecting on the Lake shore near Chicago, the first of April, 1873, I saw a specimen of this bird in a small pool of water on the beach. At first I supposed it was a Bonaparte's Gull, and was about passing it, when it arose, and as it passed toward the lake I saw it was something new to me, and fired. It

flew a few rods and fell into the Lake about thirty rods from shore. It was in perfect breeding dress, as was shown by the black markings on the head, each time it was raised while struggling in the water. A gale from off shore soon drifted it from sight.*

While this gull is an Arctic species, it is known to visit the regions of the Great Lakes and may again be observed in our vicinity.

Genus **STERNA** Linnæus, 1758.

Sterna caspia Pallas. **Caspian Tern.**

Sterna tschegrya LEPECHIN, Nov. Comm. Petrop., XIV, 1770, 500, pl. 13, fig. 2.

Sterna caspia PALLAS, Nov. Comm. Petrop., XIV, 1770, 582, pl. XXII, fig. 2.

Popular synonym: BIG MACKEREL GULL.

A not uncommon fall visitant in this vicinity. A few are seen and captured each fall at Millers, Indiana. Mr. E. W. Nelson reports seeing a "fine specimen fishing along the Lake shore at Waukegan," on the ninth of June, 1876.

The Caspian Tern is a nearly cosmopolitan species, and in North America it breeds southward to "Virginia, Lake Michigan, Texas, Nevada and California."

Sterna forsteri Nuttall. **Forster's Tern.**

Sterna forsteri NUTTALL, Manual, II, 1834, 274 (Footnote).

Sterna havelli AUDUBON, Orn. Biog., V, 1839, 122, pl. 409, fig. 1 (young in winter).

Popular synonyms: HAVELL'S TERN. STRIKER.

Of late years this bird is a rather uncommon spring and fall visitant. It is said to have bred in Illinois many years ago, when it occurred in numbers with the Wilson's or Common Tern (*Sterna hirundo*). It arrives early in April but remains only a short time. It returns from the last of July to the middle of August, when it remains for a variable period. A few dates on which specimens of this species have been taken may be of interest. I obtained one at South Chicago, May 6, 1893, and Mr. J. Grafton Parker, Jr., captured one at Millers, Indiana, on August 13, 1896.

Forster's Tern is quite generally distributed over North America, and in winter it is found as far south as Brazil.

*Bulletin Essex Institute, Vol. VIII, 1876, 147. Bulletin Nuttall Ornithological Club, Vol. I, 1876, p. 41.

Sterna hirundo LINNÆUS. **Common Tern.**

Sterna hirundo LINNÆUS, S. N., ed. 10, I, 1758, 137.

Popular synonyms: WILSON'S TERN. MACKEBEL GULL. STRIKER.
SEA SWALLOW. SEA PIGEON. SUMMER GULL. MOLLY GULL.

A spring and fall visitant, arriving in May, and at times remaining as late as the tenth of June. While migrating, thousands of individuals may be seen flying along the shore of Lake Michigan. The fall migration begins about the last of August, the birds remaining in our vicinity until October.

The range of the Common Tern extends over the greater part of the northern hemisphere, but in North America these birds are much more common east of the Plains. Its breeding range is quite wide but irregular and extends from the Arctic coast southward to Florida, Texas and Arizona.

Sterna antillarum (Less.). **Least Tern.**

Sternula antillarum LESS., Descr. Mam. et Ois., 1847, 256.

Sterna antillarum COUES, Proc. Acad. Nat. Sci. Philadelphia, 1862, 552.

Sterna superciliaris NELSON, Bull. Essex Institute, Vol. VIII, 1876, 149.

Popular synonyms: LITTLE STRIKER. SANDPETER.

The only record we have of the occurrence of this rare and beautiful little tern within our limits, is that of Mr. E. W. Nelson, who says: "A fine male specimen is in the collection of The Chicago Academy of Sciences, obtained June 11, 1876, upon the Calumet Marshes."*

While the Least Tern is not known to nest within the borders of the state of Illinois, Mr. Robert Ridgway says that it doubtless does so, for it is a summer resident nearly throughout the Mississippi Valley. Its geographical and breeding ranges are nearly coincident and extend from northern South America northward to California, Minnesota and New England.

Genus HYDROCHELIDON Boie, 1822.**Hydrochelidon nigra surinamensis** (Gmelin). **Black Tern.**

Sterna surinamensis GMELIN, S. N., I, pt. ii, 1788, 604.

Sterna plumbea WILSON, Amer. Orn., VII, 1813, 83, pl. 83 (young).

Sterna nigra NUTTALL, Manual, II, 1834, 282.

Hydrochelidon nigra surinamensis STEJNEGER, Proc. U. S. Nat. Mus., Vol. V, 1882, 40.

*Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 1876, 149.

Hydrochelidon lariformis (part) COUES, B. N. W., 1874, 704 (*neo*
Rallus lariformis LINNÆUS).

Popular synonyms: SHORT-TAILED TERN. BLACK SWALLOW.

A common summer resident in Cook County, breeding in colonies on all of our marshy lakes, and at times on the wet meadows near a body of water. Mr. B. T. Gault writes me that this species is rare in Du Page County, he having but one record of its occurrence. It arrives about the middle of May and departs the last of August.

The nest of this tern is a small cup of dead vegetation and is placed upon an old muskrat house or a dry spot on the boggy ground. It is quite difficult to locate the nest except by watching the birds, for the eggs closely resemble the ground in color.

The Black Tern is a bird of temperate and tropical America, ranging from Alaska to Brazil, and breeding from the middle United States northward.

ORDER STEGANOPODES: TOTIPAL- MATE SWIMMERS.

FAMILY PHALACROCORACIDÆ: CORMORANTS.

Genus **PHALACROCORAX** Brisson, 1760.

Phalacrocorax dilophus (Swains.). Double-crested Cormorant.

Pelecanus (Carbo) dilophus SWAINS., in Sw. & Rich. F. B. A., II, 1831, 473.

Phalacrocorax dilophus NUTTALL, Manual, II, 1834, 483.

Graculus dilophus GRAY, Gen. B., III, 1849.

Graculus dilophus a. *dilophus* COUES, B. N. W., 1874, 587.

Popular synonyms: CROW DUCK. BLACK LOON. NIGGER GOOSE.

A rather rare fall visitant in our district. I have seen them frequently on Lake Calumet. One was shot on the Little Calumet River at Liverpool, Indiana, on October 16, 1896. A young bird was shot from the government pier at Chicago, September 28, 1897, by Mr. George H. Sheridan and presented to the museum of The Chicago Academy of Sciences. Mr. E. W. Nelson says: "A regular but rather uncommon migrant and sometimes a winter resident."

Its breeding range extends from the Bay of Fundy, the Great Lakes, Minnesota and Dakota northward, and the birds winter in the southern states.

FAMILY PELECANIDÆ: PELICANS.

Genus **PELECANUS** Linnaeus, 1758.**Pelecanus erythrorhynchos** Gmelin. **American White Pelican.***Pelecanus erythrorhynchos* GMELIN, S. N. I., pt. ii, 1788, 571.*Pelecanus trachyrhynchus* LATHAM, Ind. Orn., II, 1790, 881.*Pelecanus onocrotalus* NUTTALL, Manual, II, 1834, 471.Popular synonym: **ROUGH-BILLED PELICAN.**

This bird may be looked for during the period between the first of April and November. It is included in our list, because of a specimen which was shot from the government pier at Chicago in April, 1903. In September, 1892, I obtained several specimens from a flock of between 700 and 1,000 of these birds at Meredosia, Illinois. Mr. Bowers, of the United States Fish Commission, and myself approached within 150 yards of the flock and it was comparatively easy to count them. In June, 1895, Mr. Blackwelder and myself obtained a fine pair from a flock of fourteen at Meredosia. Mr. Nelson says: "At present (1876) an exceedingly rare visitant during the migrations. Formerly they were regular and rather common migrants."

The White Pelican frequents temperate North America, being quite abundant in the interior and along the Gulf coast. While its known nesting localities are at least as far north as the state of Minnesota, there are indications that it also breeds along the Gulf coast from Florida to Texas.

ORDER ANSERES: LAMELLIROSTRAL SWIMMERS.

FAMILY ANATIDÆ: DUCKS, GEESE, AND SWANS.

Genus **MERGANSER** Brisson, 1760.**Merganser americanus** (Cassin). **American Merganser.***Mergus merganser* WILSON, Amer. Orn., VIII, 1814, 68, pl. 68 (*occ.* LINNÆUS).*Mergus americanus* CASSIN, Proc. Acad. Nat. Sci. Philadelphia, VI, 1853, 187.*Mergus merganser americanus* RIDGWAY, Proc. U. S. Nat. Mus., III, 1880, 205.*Merganser americanus* STEJNEGER, Orn. Expl. Kamtsch., 1885, 177.Popular synonyms: **MERGANSER. SHIELDRAKE. SAW-BILL. FISH DUCK. BUFF-BREASTED MERGANSER OR SHIELDRAKE.**

The American Merganser is a migrant and winter resident within our limits, and may be seen flying near the shore of Lake

Michigan from October to April, or until the lake is covered with ice, when its food of fish cannot be obtained.

Its range covers the whole of North America and it breeds from the northern United States northward.

Merganser serrator (Linnaeus). **Red-breasted Merganser.**

Mergus serrator LINNÆUS, S. N., ed. 10, I, 1758, 129.

Merganser serrator SCHÄFFER, Mus. Orn., 1789, 66.

Popular synonyms: RED-BREADED GOOSANDER OR SHELDRAKE. GAR-BILL.

A quite common winter resident on Lake Michigan, sometimes staying in our vicinity as late as the twentieth of May. Its name Red-breasted is far from appropriate, for its breast is not at all red in color.

It breeds in the northern portion of North America, migrating southward in winter through the United States. Mr. Robert Ridgway states that it breeds in northern Illinois.*

Genus **LOPHODYTES** Reichenbach, 1852.

Lophodytes cucullatus (Linnaeus). **Hooded Merganser.**

Mergus cucullatus LINNÆUS, S. N., ed. 10, I, 1758, 129.

Lophodytes cucullatus REICHENBACH, Syst. Av., 1852, p. 1X.

Popular synonyms: HOODED SHELDRAKE. WOOD SHELDRAKE. WOOD DUCK. SNOWL. MOSS-HEAD. SAW-BILL. CROW DUCK. Hairy-head. POND SHELDRAKE. COCK ROBIN DUCK. FAN-CREST. PICK-AXE. SHELDRAKE.

A rare summer resident, although common during its migrations. It is at times a winter resident. It breeds abundantly along the Kankakee River, a few miles south of our limits. A female of this species flew into the lagoon in Lincoln Park the last of July, 1896, and remained in the company of the tame ducks until December 7, 1896.

The range of the Hooded Merganser includes the whole of North America, and it breeds nearly throughout its range, nesting in knot-holes and other cavities in the trees of dense forests along streams.

Genus **ANAS** Linnaeus, 1758.

Anas boschas Linnaeus. **Mallard.**

Anas boschas LINNÆUS, S. N., ed. 10 I, 1758, 127.

Popular synonyms: GREEN-HEAD. GRAY DUCK. GRAY MALLARD.

Rare as a resident though common during the periods of migration. Occasionally during severe winters, the Mallards will

*Birds of Illinois, Vol. II, p. 190.

all go south. I have found it nesting at a point about thirty-five miles south of Chicago. Some years ago the Mallard was said to be a common summer resident.

The range of this, the best known of all our ducks, not only includes the whole of North America but also the whole of the northern hemisphere. In North America, it breeds nearly throughout its range.

Anas obscura Gmelin. **Black Duck.**

Anas obscura GMELIN, S. N., I, 1788, 541.

Popular synonyms: BLACK MALLARD. DUSKY DUCK.

A rather common migrant, arriving in the fall with the first of the Mallards, and remaining in our vicinity for a short time. Dr. Robert Ridgway says this region is nearly the western limit of its range. In the spring, the Black Duck arrives about the first of April and in the fall its first appearance is about the last of September.

The range of this duck covers eastern North America, and it breeds from the northern portion of the United States northward.

Genus **CHAULELASMUS** Bonaparte, 1838.

Chaulelasmus streperus (Linnæus). **Gadwall.**

Anas strepera LINNÆUS, S. N., ed. 10, I, 1758, 125.

Chaulelasmus streperus BONAPARTE, Geog. and Comp. List, 1838, 56.

Popular synonyms: GRAY DUCK. WIDGEON. SPECKLE-BELLY. CREEK DUCK.

I can find very few records of the Gadwall having been seen within our limits, although a number are shot each year on the Kankakee and Illinois rivers. Mr. E. W. Nelson, in his report on the "Birds of Northeastern Illinois," says: "This beautiful species is very common during the migration, from the middle of October to the last of November, and from the first to the last of April. A very rare summer resident. I have seen but two or three pairs here in the breeding season." A specimen in the museum of The Chicago Academy of Sciences was taken at Liverpool, Indiana, October 18, 1896.

A nearly cosmopolitan species, in North America breeding chiefly within the United States.

Genus **MARECA** Stephens, 1824.

Mareca penelope (Linnæus). **Widgeon.**

Anas penelope LINNÆUS, S. N., ed. 10, I, 1758, 126.

Mareca penelope SELBY, Br. Orn., II, 1833, 324.

The Widgeon is an occasional visitor within our limits. Mr. E. W. Nelson in his "Birds of Northeastern Illinois" says that Mr. C. N. Holden, Jr., of Chicago, informed him that a fine adult male was shot on the Calumet Marsh, April 13, 1876, and that it was preserved in a collection in Chicago. Other records are of interest, though most of the birds were taken on English Lake, Indiana, a short distance south of our area. These records were furnished by Mr. Ruthven Deane, of Chicago, and published in the "Auk." The last specimen recorded from Indiana is in the collection of Dr. Nicholas Rowe, of the "American Field" and was taken in 1881 or 1882 at English Lake.* Mr. Landon Hoyt took a specimen at the same place on April 13, 1893.† A young male taken by Mr. J. F. Barrell at English Lake is in Mr. Deane's private collection.‡ An adult male was killed by Mr. John E. Earle, of Hinsdale, Illinois, March 23, 1896, at English Lake.§ On March 27, 1903, Mr. James M. McKay obtained a specimen at English Lake. March 28, 1898, Mr. Harry Ehlers obtained a female at Thayer, Indiana. Mr. Peter Willem captured a male at English Lake on March 31, 1902. In a recent report,|| Mr. Deane says, "I have recently examined a fine adult male of this species, which was shot on an overflowed meadow near Nippersink Lake, Lake County, Illinois, on April 1, 1904, by Mr. Charles Muehrcke, and is now in his possession. The bird was in company with six of his American cousins, all of whom were shot. The specimen is mounted to represent dead game. This record makes the eighteenth for the interior."

The range of the Widgeon covers the northern portions of the Old World. While it has been quite frequent in the eastern United States, it is only known to breed in the Aleutian Islands in North America. It has been reported as having been taken in California.

***Mareca americana* (Gmelin). Baldpate.**

Anas americana GMELIN, S. N., I, pt. 2, 1788, 526.

Mareca americana STEPHENS, Shaw's Gen. Zool., XII, pt. ii, 1824, 135.

Popular synonyms: AMERICAN WIDGEON. GREEN-HEAD. WHITE-BELLIED POACHER. WHEAT DUCK. BALD-HEAD. BALD-CROWN.

A common species during the migrations, arriving in the spring with last of the Mallards and the Pintails. They return

*Auk, XII, 1895, 292.

†Auk, XII, 1895, 179.

‡Auk, XIII, 1896, 292.

§Auk, XIII, 1896, 255.

||Auk, XXII, 1905, 76.

in the fall about the last days of September. Mr. E. W. Nelson says, in his "Birds of Northeastern Illinois" (1876): "Not a very rare summer resident." His report would also indicate that these ducks nested in this region at that time, for he says: "It nests about the borders of marshes and prairie sloughs."

The range of this species includes North America from the Arctic Ocean south to Guatemala, and it breeds nearly throughout its range.

Genus **NETTION** Kaup, 1829.

Nettion carolinensis (Gmelin). **Green-winged Teal.**

Anas crecca WILSON, Amer. Orn., VIII, 1814, 101, pl. 60, fig. 1 (not of Linnæus).

Querquedula carolinensis STEPHENS, Shaw's Gen. Zool., XII, pt. ii, 1824, 128.

Nettion carolinensis BAIRD, B. N. Amer., 1858, 777.

Anas carolinensis GMELIN, S. N., I, pt. ii, 1788, 533.

Popular synonyms: **GREEN-WING. RED-HEADED TEAL. WINTER TEAL. MUD TEAL.**

A common migrant, and is said to winter in the southern part of the state. Our records show the earliest spring arrival to be early in March and the first fall arrival to be September 26. Mr. E. W. Nelson says that it "breeds sparingly. I have known of a few instances of its nest being found, and have myself observed several pairs of the birds in this vicinity during the breeding season." Mr. Robert Ridgway says:* "Although stated by Kennicott to breed in the northern part, (of Illinois) there appears to be no recent record of its doing so." As Mr. Kennicott died May 13, 1866, his notes regarding this species must have been made previous to that time. Mr. Ridgway also records in his "Catalogue of the Birds Ascertained to Occur in Illinois,"† the following note: "Resident, but most abundant during migrations: breeds only in the prairie districts, and winters chiefly in the lagoons of the heavily timbered bottoms."

The Green-winged Teal breeds chiefly north of the United States, but its geographical range includes the whole of North America.

Genus **QUERQUEDULA** Stephens, 1824.

Querquedula discors (Linnæus). **Blue-winged Teal.**

Anas discors LINNÆUS, S. N., ed. XII, I, 1766, 205.

Querquedula discors STEPHENS, Shaw's Gen. Zool., XII, pt. ii, 1824, 149.

Popular synonyms: **BLUE-WING. WHITE-FACE. SUMMER TEAL.**

*Birds of Illinois, V l. II, 1895, 136.

†Annals of the Lye. Nat. Hist., New York, Vol. X, 1874, 389.

A common summer resident and the last of our ducks to arrive in the spring. It nests the last of May on or near most of the small lakes of our area. On one occasion, I found a pair nesting on the prairies a long distance from water. Mr. E. W. Nelson says: "The middle of May, 1875, I obtained a nest of this species containing fourteen freshly laid eggs. It was situated near a branch of the Calumet Marsh and close to the railroad track, being about midway between the track and fence in a dense bunch of grass."

While the range of the Blue-winged Teal covers North America in general, it departs from our region early in October.

Genus **SPATULA** Boie, 1822.

Spatula clypeata (Linnaeus). **Shoveller.**

Anas clypeata LINNÆUS, S. N., ed. 10, I, 1758, 124.

Spatula clypeata BOIE, Isis, 1822, 564.

Popular synonyms: SPOON-BILL. SHOVEL-BILL. MUD-SHOVELLER.
BUTTER DUCK. BROADY.

A common migrant, and is said to have been a common summer resident in earlier days (Mr. E. W. Nelson, 1876). At this time, however, it is only on rare occasions that one of these ducks is seen within our limits in the summer. The earliest spring arrival in my records is March 30, and the first fall arrival September 12. It departs late in October.

The range of the Shoveller covers the northern hemisphere and in North America it breeds from Alaska to Texas.

Genus **DAFLA** Stephens, 1824.

Dafila acuta (Linnaeus). **Pintail.**

Anas acuta LINNÆUS, S. N., ed. 10, I, 1758, 126.

Dafila acuta BONAPARTE, Comp. List, 1838, 56.

Popular synonyms: SPIKE-TAIL. LONG-NECK. SPRIG-TAIL. PICKET-TAIL. PHEASANT DUCK. WATER PHEASANT.

This species is by far the most common of our ducks during the spring migration, the earliest record of arrival being February 6. The only record of its nesting within our limits is that of Mr. E. W. Nelson, who says:* "Each year a few pairs breed upon the marshes in this vicinity, but whether they breed in the state away from the Lake region I have no means of knowing. In the spring of 1875 several pairs of these birds nested in the prairie sloughs near the Calumet River, and on the twenty-ninth

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 139.

of May I found a nest containing three freshly laid eggs. The female was flushed from the nest when scarcely more than a rod away, and was at once joined by the male from a small slough a few rods distant. The nest was in the center of a tall, thick bunch of grass on a small ridge between two sloughs, and was a slight hollow thickly lined with grass stems; no down had been added. The parent birds circled about overhead, often coming within gunshot, during the whole time I was in the vicinity." The earliest date of its appearance on its fall migration is September 18. In the museum of The Chicago Academy of Sciences there is a specimen of the male hybrid pintail and mallard.

Its geographical range covers the northern hemisphere and includes the whole of North America, where it breeds from the northern parts of the United States northward.

Genus **AIX** Boie, 1828.

Aix sponsa (Linnæus). **Wood Duck.**

Anas sponsa LINNÆUS, S. N., ed. 10, I, 1758, 128.

Aix sponsa BONAPARTE, Comp. List, 1838, 57.

Popular synonyms: SUMMER DUCK. WOOD WIDGEON. BRIDAL DUCK

The Wood Duck is common during its migrations. Mr. E. W. Nelson says (1876) that it was a rather common summer resident in secluded localities. A pair is occasionally found breeding at Calumet Heights, Indiana, and at Long Lake near Millers, Indiana. It may also be found breeding abundantly at Kouts, Indiana, about forty-eight miles south of Chicago. A young female of this species alighted in the duck pond in Lincoln Park, Chicago, in September, 1896, and associating with the domestic ducks in the pond, became so tame that it could almost be taken in the hand. It arrives in April and departs about the last of October.

The Wood Duck breeds throughout its range which covers the whole of temperate North America.

Genus **AYTHYA** Boie, 1822.

Aythya americana (Eyton). **Redhead.**

Fuligula americana EYTON, Monogr. Anat., 1838, 155.

Fuligula ferina BONAPARTE, Synop., 1828, 392.

Fuligula ferina var. *americana* COUES, Key, 1872, 289.

Aythya americana BAIRD, B. N. Amer., 1858, 793.

Popular synonyms: RED-HEAD. CANVAS-BACK (erroneously). AMERICAN POCHARD. RED-HEADED BROAD-BILL.

A common migrant. In years past this was one of our most common ducks but as they decoy very readily, they are becoming rather scarce. Formerly Wolf and George lakes in Indiana were the favorite feeding grounds of this and the following species. However, because of the draining of this region, the beds of water-celery and wild rice have been destroyed, thus removing the food supply of these ducks and causing them to seek new feeding grounds. They arrive from the south early in March, and return from the north during the latter part of October.

The Redhead breeds from the northern part of the United States northward, and winters as far south as Central America.

Aythya vallisneria (Wilson). Canvas-back.

Anas vallisneria WILSON, Amer. Orn., VIII, 1814, 103.

Fuligula vallisneria STEPHENS, Shaw's Gen. Zool., XII, pt. ii, 1824, 196.

Aythya vallisneria BOIE, Isis, 1826, 980.

Popular synonyms: WHITE-BACK. RED-HEADED BULL-NECK. BULL-NECK.

A rather uncommon migrant, but abundant in former years. In the spring the Canvas-back arrives usually during March and stays in this vicinity for a short time. During the migration periods of the seventies, the water-celery beds in Calumet and Wolf lakes fairly swarmed with the ducks of this species, sportsmen journeying from the east and even from Europe to bag them. The earliest recorded arrival in the spring is that of Mr. J. Grafton Parker, Jr., who observed a Canvas-back on February second. It returns rather late in the fall and remains until the ponds and smaller lakes are frozen over.

The range of the Canvas-back includes nearly the whole of North America, and it breeds from the northwestern states northward to Alaska.

Aythya affinis (Eyton). Lesser Scaup Duck.

Fuligula marila AUDUBON, Orn. Biog., III, 1835, 226.

Fuligula affinis EYTON, Monr. Anat., 1838, 157.

Fuligula marila var. *affinis* FORSTER, in Cat. of the Birds ascertained to occur in Ill., Ann. Lyc. of Nat. Hist. N. Y., Vol. X, 389, 1874.

Aythya affinis STEJNEGER, Or. Expl. Kamtsch., 1885, 161.

Popular synonyms: LITTLE BLACK-HEAD. LITTLE BLUE-BILL. RIVER DUCK. BROAD-BILL. RIVER SCAUP. CANNON BALL. MUD BLUE-BILL. MARCH BLUE-BILL. RIVER SHUFFLER.

This is an abundant migrant and the most common of our lake ducks. It is a very hardy bird, arriving early in March on its northward journey and returning late in the fall to remain with us until the lakes are frozen over. Mr. J. Grafton Parker,

Jr., informs me that he observed a flock of thirteen of these ducks in the Chicago harbor on May 25, 1895. Mr. E. W. Nelson says:* "This is not an uncommon species upon the larger marshes and inland lakes during the breeding season. * * * About the time they leave for more northern breeding grounds they congregate in very large flocks on rivers or small lakes, and soon all have disappeared from these haunts and none, except the comparatively few which remain to breed, are found there again until they return in the autumn." This is the only record that I can find of the breeding of the Lesser Scaup within our limits.

The Lesser Scaup Duck breeds chiefly north of the United States, but its geographical range includes the whole of North America.

Aythya collaris (Donovan). **Ring-necked Duck.**

Anas collaris DONOVAN, Br. Birds, VI, 1839, pl. 147.

Fuligula collaris BONAPARTE, List B. Europe, 1842, 73.

Aythya collaris RIDGWAY, Proc. U. S. Nat. Mus., VIII, 1885, 356.

Popular synonyms: **RING-BILL. BLACK-HEAD. FALL DUCK. BLACK JACK. MOON-BILL. BLUE-BILL. RING-BILLED SHUFFLER.**

An abundant migrant, arriving from the south in March, and returning from the north in September. This Duck frequents the marshes of our area in large numbers, during its migrations, and is often mistaken for the Lesser Scaup Duck. The only record which I have found of its breeding within our borders, is that of Mr. E. W. Nelson, who says:* "This species also breeds about the marshes in northeastern Illinois, but in smaller numbers than the preceding."

The range of the Ring-necked Duck includes the whole of North America, and it breeds from Iowa, southern Wisconsin and Maine northward.

Genus **CLANGULA** Leach, 1819.

Clangula clangula americana (Bonaparte). **American Golden-eye.**

Anas clangula WILSON, Amer. Orn., VIII, 1814, 62, pl. 67, fig. 5 (*neo* Linnaeus).

Fuligula clangula BONAPARTE, Synopsis, 1838, 393.

Clangula americana BONAPARTE, Comp. List, 1838, 58.

Bucephala clangula COUES, Key, 1872, 290.

Bucephala clangula var. *americana* RIDGWAY, Orn. 40th Par., 1877, 626.

Glaucionetta clangula americana STEJNEGER, Proc. U. S. National Mus., VIII, 1885, 409.

Clangula clangula americana FAXON, Auk, XIII, 1896, 215.

Popular synonyms: **WHISTLER. WHISTLE-WING. GREAT-HEAD. BRASS-EYE. MERRY-WING. COOT. IRON-HEAD. COB-HEAD.**

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 141.

When the surface of Lake Michigan is quite frozen over, large flocks of these ducks may be seen about the airholes, or they may be seen among the ice floes, in company with Old-squaw Ducks (*Harelda hycmalis*), and White-winged Scoters (*Oidemia deglandi*). A common winter resident.

The range of the Golden-eye covers nearly the whole of North America and it breeds from the northern border of the United States northward.

***Clangula islandica* (Gmelin). Barrow's Golden-eye.**

Anas islandica GMELIN, S. N., I, 1788, 541.

Bucephala islandica BAIRD, B. N. Amer., 1858, 796.

Clangula islandica BONAPARTE, Cat. Met. Ucc. Eur., 1842, 74.

Glaucionetta islandica STEJNEGER, Proc. U. S. National Mus., VIII, 1885, 409.

Popular synonym: ROCKY MOUNTAIN GOLDEN-EYE.

A rare winter visitant. I have a specimen of this duck which I shot on Lake Michigan, near the Daily News Sanitarium, December 11, 1896. The bird was flying in company with another, probably of the same species.

This Golden-eye is a bird of the far north passing southward in winter only as far as New York, Illinois and Utah. It breeds north of the United States and also in the Rocky Mountains as far south as Colorado.

Genus **CHARITONETTA** Stejneger, 1885.

***Charitonetta albeola* (Linnaeus). Buffle-head.**

Anas albeola LINNÆUS, S. N., ed. 10, I, 1758, 124.

Fuligula albeola BONAPARTE, Synopsis, 1828, 394.

Clangula albeola STEPHENS, Shaw's Gen. Zool., XII, ii, 1824, 184.

Bucephala albeola BAIRD, B. N. Amer., 1858, 797.

Charitonetta albeola STEJNEGER, Orn. Expl. Kamtsch., 1885, 166.

Popular synonyms: BUTTER-BALL. SPIRIT DUCK. DIPPER. SCOTCH TEAL. CANNON BALL. DUMMY DUCK, etc.

Formerly the Buffle-heads were common, but now they are rather uncommon. At the time of their fall migration, they arrive in October and remain until the last of April. While they are often seen on Lake Michigan, they are much more common on the smaller inland lakes. Very often they will exhibit a peculiar habit of flying directly toward the gunner after being shot at, thus affording a second chance for a shot.

The Buffle-heads breed north of the United States, and in winter pass as far southward as Cuba and Mexico.

Genus **HARELDA** Stephens, 1824.**Harelda hyemalis** (Linnæus). **Old-squaw.***Anas hyemalis* LINNÆUS, S. N., ed. 10, 1, 1758, 126.*Anas glacialis* LINNÆUS, S. N., ed. 12, 1, 1766, 202.*Harelda glacialis* "LEACH," STEPHENS, Shaw's Gen. Zool., XII, pt. ii, 1824, 175, pl. 58.*Clangula hiemalis* BREHM, Handb. Vög. Deutschl., 1831, 933.*Harelda hiemalis* BREHM, Vögelsang, 1855, 386.

Popular synonyms: OLD WIFE. LONG-TAILED DUCK. OLD MOLLY. SCOLDER. OLD INJUN, etc.

A very common winter resident. Large numbers of these ducks are shot each season from the breakwater and piers along the lake front at Chicago. This is wanton destruction, as they are not fit for food. They arrive about the middle of November and remain with us until the last of March. I have found a few as late as May, but I am inclined to think that they were crippled birds. Just before they migrate in the spring, they gather in flocks of considerable size and are quite noisy.

The Old-squaw Ducks breed in the far north but their fall migrations take them almost to the southern border of the United States.

Genus **SOMATERIA** Leach, 1819.**Somateria dresseri** (Sharpe). **American Eider.***Anas mollissima* WILSON, Amer. Orn., VIII, 1814, 122, pl. 71 (*neo* Linnæus).*Somateria mollissima* BONAPARTE, Comp. List, 1838, 57 (part).*Somateria dresseri* SHARPE, Ann. Mag. Nat. Hist., July 1871, 51, figs. 1, 2.

Popular synonyms: SQUAW DUCK. BIG SEA DUCK.

A very rare winter resident. Mr. E. W. Nelson reported in 1876 that in his collection he had an immature specimen obtained near Chicago in December, 1874, and also stated that they had been noted several times by Dr. H. B. Bannister at Evanston. I am inclined to think that some of the birds seen in this vicinity and reported as individuals of this species are in reality immature scoters.

The range of the American Eider is a very limited one during the breeding season, reaching only from Maine to Labrador. In winter it passes as far south as the Delaware River and westward to the Great Lakes, where it has been reported on the Ohio, Illinois and Wisconsin shores.

Genus **OIDEMIA** Fleming, 1822.**Oidemia americana** (Swains). **American Scoter.**

Anas nigra WILSON, Amer. Orn., VIII, 1814, 135, pl. 72 (not of Linnaeus).

Oidemia americana SW. & RICH., Fauna Bor. Amer., II, 1831, 450.

Oedemia americana COUES, Key, 1872, 293.

Oedemia nigra var. *americana* RIDGWAY, Ann. Lyc. Nat. Hist. N. Y., Vol. X, 1874, 390.

Popular synonyms: AMERICAN BLACK SCOTER. BUTTER-BILL. BUTTER-BILLED COOT. HOLLOW-BILLED COOT. SCOTER DUCK. YELLOW-BILL. SMUTTY, etc.

I have no records of the occurrence of this species within our limits except the following two: Mr. E. W. Nelson says: "Rather common upon the Lake. Winter resident. Arrives the first of November and departs by the first of April." Mr. Robert Ridgway gives the following record:* "Winter visitant to Lake Michigan, Dr. J. W. Velie."

While the American Scoter breeds in Labrador and the northern interior and is a sea bird, its occurrence within our limits is not strange, for it winters on the Great Lakes to some extent and has been noted as far south as the Ohio River.

Oidemia deglandi (Bonaparte). **White-winged Scoter.**

Anas fusca WILSON, Amer. Orn., VIII, 1814, 137, pl. 72 (not of Linnaeus).

Melanetta velveta RIDGWAY, Ann. Lyc. Nat. Hist. N. Y., Vol. X, 1874, 390.

Oedemia fusca NELSON, Bull. of the Essex Institute, Vol. VIII, 1876, 143.

Oedemia fusca COUES, Check List, 2d ed., 1882, No. 738.

Oidemia deglandi BONAPARTE, Rev. Crit. de l'Orn. Europe de Dr. Degl., 1850, 108.

Popular synonyms: AMERICAN VELVET SCOTER. VELVET DUCK. WHITE-WINGED COOT. BULL COOT.

A not uncommon winter resident, though I have the record of only one in the adult plumage that has been taken within our limits. This specimen, a very fine male bird, is in my collection. I have observed quite a number of this species which have been found dead on the shore of Lake Michigan. They were in immature plumage, and their death was probably caused by the birds failing to obtain their accustomed food, or by the elements. Mr. E. W. Nelson in 1876 made the following statement regarding this species: "Like the preceding (*Oidemia*

*Cat. of the Birds Ascertained to Occur in Ill. Ann. Lyc. Nat. Hist. N. Y., Vol. X, 1874, 390.

americana) a rather common winter resident upon the Lake, and occurs throughout the state, specimens being sent to the Chicago market from the Illinois River and various other streams in Central Illinois." Dr. J. W. Velie also records this Scoter as a winter visitant to Lake Michigan.*

The White-winged Scoter breeds north of the United States, and winters as far south as the Great Lakes, southern Illinois and Lower California. On the Atlantic coast it winters as far south as Chesapeake Bay.

***Oidemia perspicillata* (Linnæus). Surf Scoter.**

Anas perspicillata LINNÆUS, S. N., ed. 10, I, 1758, 125.

Oidemia perspicillata STEPHENS, Gen. Zool., XII, pt. ii, 1824, 219.

Oidemia perspicillata COUES, Key, 1872, 294.

Popular synonyms: SURF DUCK. SEA DUCK. HORSE-HEAD COOT.
SURF COOT. GOOGLE-NOSE. GRAY COOT, etc.

Mr. E. W. Nelson says in his "Birds of Northeastern Illinois": "A common winter resident upon Lake Michigan and occurs throughout the state at this season. Quite a number of specimens were taken upon the Calumet Marshes during the fall of 1875, and many others were seen. Arrives the last of October and departs the last of March." I can find no records of its occurrence within our limits since the date in Mr. Nelson's note. Two specimens in immature plumage were taken by Mr. J. Grafton Parker at Meredosia, Illinois, on November 9, 1896.

The range of this species would indicate a probability of its occurrence in our region. "Coasts and larger inland waters of northern North America; in winter south to Florida, the Ohio River, and San Quentin Bay, Lower California."

Genus **ERISMATURA** Bonaparte, 1832.

***Erismatura jamaicensis* (Gmelin). Ruddy Duck.**

Anas jamaicensis GMELIN, Syst. Nat., I, ii, 1788, 519.

Anas rubida WILSON, Amer. Orn., VIII, 1814, 128, 131, pl. 71, figs. 5, 6.

Erismatura rubida BONAPARTE, Comp. List, 1838, 59.

Erismatura jamaicensis SALVAD., Cat. Bds. Br. Mus., XXVII, 1896, 445.

Popular synonyms: DUMMY DUCK. SPINE-TAILED DUCK. HEAVY-TAILED COOT. STIFF-TAIL. BRISTLE-TAIL. ROOK. SLEEPY DUCK. SLEEPY COOT. FOOL DUCK. DEAF DUCK. BOOBY COOT, etc.

A not uncommon migrant. It may be found on most of the lakes of our region in April and in October in company with the Redhead (*Aythya americana*) and the Lesser Scaup (*Aythya*

*Cat. of the Birds Ascertained to Occur in Illinois. Ann. Lyc. Nat. Hist. N. Y., Vol. X, 1874, 390.

affinis). Mr. J. Grafton Parker, Jr., informs me that he has seen and taken the Ruddy Duck on Wolf Lake, Indiana, as late as the thirtieth of May. It may breed at the present time within our limits. Mr. E. W. Nelson says:* "The middle of September, 1875, my friend Mr. T. H. Douglas, of Waukegan, found a pair with eight or ten full grown young in a small lake near that place, and obtained several specimens. As the fall migration of this species does not commence until some weeks later than this, I think it very probable these birds were hatched in the vicinity. This supposition is rendered still more reasonable by the following observations. The 12th of June, 1875, while walking through the dense grass close to the shore of Calumet Lake, looking for sharp-tailed finches, a female ruddy duck started from the grass a few yards in advance and flew heavily away and alighted in the reeds a short distance out from shore. Being well acquainted with the species, I at once recognized the bird by unmistakable peculiarities of form and flight, as well as coloration, so I did not shoot it as I could easily have done, but instead, made a thorough search for the nest, which I was certain must be near. The dense grass, about three feet high, proved an effectual shield, however, and I was compelled to depart without the coveted eggs."

The breeding range of the Ruddy Duck is nearly coincident with its geographical range, which includes the whole of North America south to Guatemala, and it is also found in Cuba and other West India islands.

Genus **CHEN** Boie, 1822.

Chen hyperborea (Pall.). Lesser Snow Goose.

Anas hyperborca PALL., Spiel. Zool., VI, 1769, 25.

Chen hyperborca BOIE, Isis, 1822, 563.

Anser hyperboreus var. *albatus* CASS., of some authors.

Popular synonyms: WHITE BRANT. SNOW GOOSE.

A common migrant. Though rarely taken within our limits, many are seen passing over. They usually arrive on their northward passage from the last of January to April, and return from the north in October.

The Lesser Snow Goose breeds in Alaska and during its fall migrations passes as far south as southern Illinois and southern California.

*Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 1876, 143.

Chen hyperborea nivalis (Forster). **Greater Snow Goose.***Anas nivalis* FORSTER, Philos. Trans., LXII, 1772, 413.*Chen hyperborea nivalis* RIDGWAY, Proc. Biol. Soc. Washington, II, 1884, 107.*Anser hyperboreus* var. *hyperboreus* PALL., of some authors.

Popular synonyms: MEXICAN GOOSE. RED GOOSE. WHITE BRANT. TEXAS GOOSE. COMMON WAVEY.

While I have obtained no record of the capture of this bird within our limits, Mr. E. W. Nelson, says, in his report* on the birds of this region, that he thinks it occurs in equal numbers with the preceding species. I have seen specimens of both forms of this species which were taken at Liverpool, Indiana.

While the Lesser Snow Goose is a Pacific coast form, the Greater Snow Goose may be considered its Atlantic coast representative. Its breeding grounds are probably confined to the eastern portion of British America, and in its fall migrations it passes southward through the eastern United States, including the Mississippi Valley, to the Gulf coast.

Chen caerulescens (Linnæus). **Blue Goose.***Anas caerulescens* LINNÆUS, S. N., ed. 10, I, 1758, 124.*Anser caerulescens* VIEILL., Enc. Meth., I, 1823, 115.*Chen caerulescens* GUNDEL., in Poey's Report, Fis.-nat. Isla Cuba, I, 1865-1866, 387.

Popular synonyms: BLUE-WINGED GOOSE. BLUE BRANT. WHITE-HEADED BRANT or GOOSE. WHITE-HEAD. BALD BRANT.

A common migrant. In former years large numbers of this species were taken on the Calumet marshes, but now few are seen nearer than the Kankakee River region. I have observed them at Hyde Lake, Indiana, and at Grand Crossing.

The range of the Blue Goose includes the interior of North America. It breeds on the eastern shores of Hudson Bay and in Labrador. In the winter it migrates southward through the Mississippi Valley to the coast of the Gulf of Mexico.

Genus **ANSER**, Brisson, 1760.**Anser albifrons gambeli** (Hartlaub). **American White-fronted Goose.***Anser albifrons* BONAPARTE, Synop., 1828, 376.*Anser gambeli* HARTLAUB, Rev. et Mag. Zool., 1852, 7.*Anser albifrons* var. *gambeli* COUES, Key, 1872, 282.

Popular synonyms: BRANT. SPECKLE-BELLY. LAUGHING GOOSE.*

PIED BRANT. GRAY BRANT. PRAIRIE BRANT or GOOSE. YELLOW-LEGGED BRANT or GOOSE. HARLEQUIN BRANT.

*Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 1876, 137.

A common migrant. It arrives from the north in October and returns again in March, when small flocks may be observed on the prairies or in stubble fields. Mr. Nelson says:* "The individual variation in this species is very great. A large majority have the ordinary white frontal band and the under parts plentifully mottled with black. In others the black gradually decreases until some specimens do not show the least trace of dark on the abdomen; in such instances the frontal white band is usually present. The young exhibit a dark brown frontal band in place of white, but with more or less dark spots on the abdomen. In very high plumage the abdomen becomes almost entirely black, only a few rusty colored feathers being interspersed through the black. The white nail on the bill is generally crossed by one or more longitudinal stripes of dark horn-color. In spring, as the breeding season approaches, the bill becomes a clear waxy yellow. There is also much variation in size among adults of this species. I have examined a number of specimens which by correct comparison were at least *one-fourth* smaller than the average."

This goose breeds in the far north, and its range includes the whole of North America.

Genus **BRANTA** Scopoli, 1769.

Branta canadensis (Linnaeus). **Canada Goose.**

Anas canadensis LINNAEUS, S. N., ed. 10, I, 1758, 123.

Anser canadensis VIEILLLOT, Enc. Meth., 1823, 114.

Bernicla canadensis BOIE, Isis, 1826, 921.

Branta canadensis BANNISTER, Proc. Acad. Nat. Sci. Philadelphia, 1870, 131.

Branta canadensis var. *canadensis* "LINNAEUS," in NELSON'S Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 1876, 138.

Popular synonyms: COMMON WILD GOOSE. BAY GOOSE. CRAVAT GOOSE. HONKER. BIG WILD GOOSE.

The Canada Goose is the largest and best known of our wild geese. At one time it was a resident within our limits, but now it probably appears here only as a migrant which is quite common. The Calumet marshes formed the old breeding site of these birds in this region. Mr. B. T. Gault, of Glen Ellyn, Illinois, says that on June 23, 1877, he observed a pair of these birds with young on Calumet Lake. There were from four to

*Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 1876, 136.

seven of these goslings which appeared to be at least two or three weeks old. The majority of these birds arrive early in March, and on their southward journey, in the fall, appear in October. Mr. E. W. Nelson says that the Canada Goose "formerly bred commonly in the marshes throughout the state, and still breeds sparingly in the more secluded situations."*

The Canada Goose breeds in the northern United States and the British Possessions. It winters as far south as Mexico.

***Branta canadensis hutchinsii* (Rich.). Hutchins's Goose.**

Anser hutchinsii SW. & RICH., Fauna Bor. Amer., II, 1831, 470.

Bernicla hutchinsii WOODH., Sitgr. Exp., 1853, 102.

Branta hutchinsii BANNISTER, Proc. Acad. Nat. Sci. Philadelphia, 1870, 131.

Branta canadensis var. *hutchinsii* COUES, Key, 1872, 284.

Popular synonyms: LESSER CANADA GOOSE. GRAY GOOSE. LITTLE WILD GOOSE. ESKIMO GOOSE. PRAIRIE GOOSE. BAY GOOSE.

Both Mr. E. W. Nelson* and Mr. Robert Ridgway† record this little goose as of frequent occurrence in Illinois. Mr. Ridgway says that it is abundant, while Mr. Nelson speaks of it as common. Within our limits it seems to be far from common. Mr. J. Grafton Parker, Jr., informs me that he has observed one individual near Calumet Lake. I have noticed a small form of this genus passing overhead which must belong either to *hutchinsii* or to *minima*. While I have no record of the taking of this species in our territory, there can be no doubt that these geese at least pass over the Calumet region during their journeys.

Though the range of this species includes North America in general, it breeds only in the Arctic regions and passes south in winter chiefly through the western United States and the Mississippi Valley.

***Branta bernicla* (Linnæus). Brant.**

Anas bernicla LINNÆUS, S. N., ed. 10, I, 1758, 124.

Anser bernicla ILLIG., Prodr., 1811, 277.

Branta bernicla SCOPOLI, Ann. I. Hist. Nat., 1769, 67.

Popular synonyms: BRANT GOOSE. BRENT GOOSE. COMMON BRANT.

The only record that I have found regarding the occurrence of the Brant within our limits is that of Mr. Robert Kennicott, who gives it in his list of Cook County Birds‡ without comment. In his introduction to this list, he says, "Nearly all the species

*Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 1876, 138.

†Birds of Illinois, Vol. II, pt. 1, 1895, 122.

‡Trans. of the Illinois State Agri. Soc., Vol. I, 1853-1854, 588.

named I have observed myself." He also states that "for several of the birds I am indebted to Dr. Hoy, of Racine." Mr. E. W. Nelson says:† "The only instance known to me of its capture in this portion of the country is a specimen taken by Dr. Hoy, from a flock of three, upon the Lake shore near Racine," a few miles north of our limits.

While the range of this species includes the northern parts of the whole northern hemisphere, in North America it is found chiefly on the Atlantic coast, and is rarely seen away from salt water. Professor Cooke says:‡ "During the winter of 1883-1884 this species was represented from Illinois southward by a few rare visitants. In the spring it was rare south of Minnesota, but by the time it reached that State its numbers had been increased by recruits from the southeast, and it became almost common." Professor Cooke also calls attention to the "uncertainty in using the records concerning this species because it is commonly confounded with the Snow Goose, which is locally known as Brant all through the West."

Genus **OLOR** Wagler, 1832.

Olor columbianus (Ord). Whistling Swan.

Cygnus bewicki SW. & RICH., Fauna Bor. Amer., II, 1831, 465 (*neo* Yarr.).

Cygnus americanus SHARPLESS, Doughty's Cab. N. II., I, 1830, 185, pl. 16.

Anas columbianus ORD, in Guthrie's Geog., 2d Amer. ed., 1815, 319.

Olor columbianus STEJNEGER, Proc. U. S. National Mus., V, 1882, 210.

Popular synonym: AMERICAN SWAN.

Formerly a very common migrant, arriving in the spring about the middle of March and returning sometime in September. At the present time it is much rarer, only a few being seen each year. I have seen several specimens of this species which were taken by club members at Liverpool, Indiana. Recently, I saw and shot at one near Hyde Lake, Indiana. Mr. E. W. Nelson says:* "In the spring of 1876 they were more numerous than usual; quite a large number of specimens were in market and many were seen on the small lakes and large prairie sloughs in this vicinity."

The Whistling Swan breeds in the far north, but its geographical range covers the whole of North America.

†Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 188.

‡Bird Migration in the Mississippi Valley, p. 78.

*Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 1876, 136.

ORDER HERODIONES: HERONS, STORKS, IBISES.

FAMILY ARDEIDÆ: HERONS, BITTERNS, ETC.

Genus **BOTAURUS** Hermann, 1783.

Botaurus lentiginosus (Montague). **American Bittern.**

Ardea lentiginosa MONTAGUE, Orn. Dict. Suppl., 1813.

Botaurus lentiginosus STEPHENS, Shaw's Gen. Zool., XII, ii, 1819, 592.

Botaurus minor BOIE, Isis, 1826, 979.

Popular synonyms: STAKE-DRIVER. THUNDER-PUMP. BOG-BULL. POST-DRIVER. MIRE-DRUM. LOOK-UP. INDIAN HEN, etc.

A common summer resident, arriving early in April and nesting where the growth of rushes is very heavy, or in small reedy ponds in the timber. It departs for its winter home further south about the latter part of October or early in November.

Its geographical range covers temperate North America and it winters as far south as Cuba and Guatemala.

Genus **ARDETTA** Gray, 1842.

Ardetta exilis (Gmelin). **Least Bittern.**

Ardea exilis GMELIN, S. N., I, ii, 1788, 645, No. 83.

Ardetta exilis GUNDEL., J. f. O., 1856, 345.

Botaurus exilis REICHEN., J. f. O., 1877, 244.

Popular synonyms: TORTOISE-SHELL BITTERN. AMERICAN LEAST BITTERN. LITTLE YELLOW BITTERN. LITTLE BITTERN. MINUTE BITTERN.

A common summer resident and may be found nesting in the heavy cane of the marshes and sloughs in the vicinity of Hyde, Wolf and Calumet lakes, Indiana. Its nest is a frail platform placed in the upright canes at a height of about three feet above the water. The Least Bitterns arrive early in April and depart for their winter home about the last of September.

The range of this species includes the whole of North America from the British Possessions southward, and in South America into Brazil.

Genus **ARDEA** Linnæus, 1758.

Ardea herodias Linnæus. **Great Blue Heron.**

Ardea herodias LINNÆUS, S. N., ed. 10, I, 1758, 143.

Popular synonyms: BLUE CRANE. BIG FLY-UP-THE-CREEK. SANDHILL CRANE.

A not uncommon summer resident. Large colonies nest in the Kankakee region, just south of our limits, the birds pre-

ferring deep woods and the tallest trees. They often place as many as ten nests in one tree. A few pairs nest between Long Lake and Lake Michigan in Indiana. Mr. B. T. Gault found a colony of these birds nesting at Wheeling on the Desplaines River, April 29, 1889. (See plate VI.) The herons arrive in March and are quite shy until after the breeding season, when a few pairs, or a single bird, may be seen about the small lakes and rivers of our area. The majority of the herons depart on their southward journey about the last of September.

The range of the Great Blue Heron covers the whole of North America from Hudson Bay and the Fur Countries south through Central America into northern South America.

Genus **HERODIAS** Boie, 1822.

Herodias egretta (Gmelin). **American Egret.**

Ardea egretta GMELIN, S. N., I, ii, 1788, 620.

Herodias egretta GRAY, Gen. B., III, 1849.

Herodias alba var. *egretta* RIDGWAY, Ann. Lyc. N. Y., 1874, 386.

Popular synonyms: GREAT WHITE HERON. WHITE CRANE. SNOWY HERON. GHOST BIRD. GREAT EGRET.

The American Egret is either a visitant or a summer resident in nearly every portion of Illinois. Within our limits it is a casual fall visitant. It may have bred here years ago before the region became so largely settled. Mr. J. Grafton Parker, Jr., informs me that he shot a pair of this species July 27, 1885, in Woodlawn, Chicago, on the site of the newer portion of Jackson Park. In 1889 I saw some of these birds at Grand Crossing, Chicago, and I have taken them at Liverpool, Indiana. In May, 1895, Mr. Charles Eldredge collected the American Egret and its eggs in the heronies at Kouts, Indiana. He found the birds nesting in the same trees with the Great Blue Heron (*Ardea herodias*). It is said to be abundant all through the summer on the Illinois River below Peoria.

The range of the American Egret is extensive, covering the whole of temperate and tropical America from Nova Scotia, Ontario, Minnesota and Oregon to Patagonia. It is also found in the West Indies.

Genus **EGRETTA** Forster, 1817.

Egretta candidissima (Gmelin). **Snowy Heron.**

Ardea candidissima GMELIN, S. N., I, pt. ii, 1788, 633, No. 45.

Egretta candidissima GOSSE, Birds Jamaica, 1847, 336.

Garzetta candidissima BONAPARTE, Consp. II, 1855, 119.

Popular synonyms: LITTLE WHITE EGRET. LITTLE SNOWY HERON.
LITTLE EGRET.

I include this species simply on the authority of the following reports of Mr. Robert Kennicott and Mr. E. W. Nelson. Mr. Kennicott includes it in his "Catalogue of the Animals Observed in Cook County, Illinois,"* with the comment "common." He also marks it with an asterisk which, as I understand his use of the mark, indicates that it is "known to nest in Cook County." His note is under the name "*Egretta candidissima*, Gmel. White Heron." Mr. E. W. Nelson says that the Little White Egret is "much less common than the preceding (*Hierodias egretta*). Occurs at the same time." Mr. Robert Ridgway says:† "This beautiful Egret occurs during summer in various parts of the State, but probably not abundantly except in the more southern portions."

Its range includes the whole of temperate and tropical America from the British Possessions on the north to Chili and the Argentine Republic on the south.

Genus **BUTORIDES** Blyth, 1849.

Butorides virescens (Linnaeus). **Green Heron.**

Ardea virescens LINNAEUS, S. N., ed. 10, I, 1758, 144.

Butorides virescens BONAPARTE, Consp., II, 1855, 128.

Popular synonyms: SCHYTEPOKE. SQUAWK. BOOBY. FLY-UP-THE-CREEK. CRAB-CATCHER.

Formerly a common but now a rare summer resident, arriving early in April. A favorite nesting site of this species is in the heavy bushes bordering the rivers. It departs for the winter early in September.

Its range includes the whole of temperate North America from Ontario and Oregon on the north to Central America and the West Indies on the south.

Genus **NYCTICORAX** Stephens, 1819.

Nycticorax nycticorax naevius (Bodd.). **Black-crowned Night Heron.**

Ardea naevia BODD., Tabl. Pl. Enl., 1783, 56.

Nyctiardea grisea var. *naevia* ALLEN, Bull. Mus. Comp. Zool., III, 1872, 182.

Nycticorax nycticorax naevius ZELEDON, Proc. U. S. Nat. Mus., VIII, 1885, 113.

*Trans. of the Illinois State Agri. Soc., Vol. I, 1853-1854, 587.

†Birds of Illinois, Vol. II, pt. 1, 1895, 126.

Popular synonyms: AMERICAN BLACK-CROWNED NIGHT HERON. QUAE.
QUA-BIRD. QUAWK.

Although abundant throughout the summer and fall, I have never found it breeding within our limits. It may usually be seen, during the day time, roosting in the tops of the trees of the woods bordering our numerous small lakes and swamps. Mr. E. W. Nelson says:* "The first of July, 1874, I saw a few young of the year in the Calumet marshes." He also found it nesting, and counted fifty nests within an area of two acres, at Grass Lake, Lake County, Illinois, a few miles north of our limits. These nests were built in dense bunches of rice, and were placed upon the stiff stalks of rice and cane of the year before. These birds leave our neighborhood early in October.

The range of this Heron includes the whole of temperate and tropical America from the British Possessions south to Chili.

ORDER PALUDICOLÆ: CRANES, RAILS, ETC.

FAMILY GRUIDÆ. CRANES.

Genus **GRUS** Pallas, 1766.

Grus americana (Linnæus). Whooping Crane.

Ardea americana LINNÆUS, S. N., ed. 10, I, 1758, 142.

Grus americana VIEILLOT, Nouv. Dict. d'Hist. Nat., XIII, 1817, 557.

Grus hoyanus DUDLEY, Proc. Acad. Nat. Sci. Philadelphia, VII, 1854, 64 (Young).

Popular synonyms: GREAT WHITE CRANE. WHITE SANDHILL CRANE.

A few are heard, while passing overhead during their migrations, uttering their discordant cries. Mr. B. T. Gault informs me that his observations show that they arrive early in the spring and that the latest record of their return in the fall is August 6. Mr. E. W. Nelson says that it was "once an abundant migrant, but is now of rare occurrence in this vicinity." Mr. Robert Kennicott states that, "Though at present exceedingly rare, this bird was once not uncommon in this region."|| The only record I have found of the actual taking of a specimen within our limits is that of Spencer F. Baird who mentions† a specimen of this species which was collected by Mr. Thomas E. Blacknev who took it at Chicago in June, 1858. This specimen is now in the collection of the Smithsonian Institution.

*Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 1876, 131.

†Trans. of the Illinois State Agri. Soc., Vol. I, 1853-1854, 587.

‡Pacific R. R. Reports Vol. IX, 1858, 655.

The Whooping Crane has a rather narrow range in the interior of North America. It lies between Colorado and Ohio, and extends from the Fur Countries southward to Florida, Texas and Mexico.

Grus mexicana (Müll.). Sandhill Crane.

Ardea (grus) mexicana MÜLL., S. N., Suppl., 1776, 110.

Grus mexicana VIEILLOT, Nouv. Diet. d'Hist. Nat., XIII, 1817, 561.

Grus canadensis NUTTALL Man., II, 1834, 38 (*nee Ardea canadensis* Linnæus).

Popular synonym: BROWN CRANE.

A rare migrant. According to Mr. E. W. Nelson, they formerly nested abundantly in the larger marshes of our region. Mr. B. T. Gault informs me that in the seventies he saw single birds and occasionally two or three together, flying high above the city in a northerly direction. However, he never saw them in the fall. In the museum of Northwestern University there is a fine specimen of this species, taken in the seventies by Mr. Charles S. Raddin, who shot the bird at Evanston while walking along the beach of Lake Michigan.

The range of the Sandhill Crane covers the southern half of North America, though it is said to be rare on the Atlantic coast north of Georgia. It breeds in Florida and Cuba and in the states west of the Mississippi River to the Pacific coast.

FAMILY RALLIDÆ: RAILS, GALLINULES AND COOTS.

Genus **RALLUS** Linnæus, 1758.

Rallus elegans Audubon. **King Rail.**

Rallus elegans AUDUBON, Orn. Biog., III, 1835, 27, pl. 203.

Popular synonyms: RED-BREASTED RAIL. MARSH HEN. MUD HEN. SEDGE HEN.

A common summer resident, nesting in the thick rushes bordering our lakes and in clumps of grass in meadow marshes. It is the largest of our rails, and is very shy, rarely taking wing and depending upon its long legs as means of escaping an intruder. The King Rails arrive within our limits when the grass is quite short and affords but poor shelter for them. In consequence large numbers are annually shot. They begin to depart for their winter home the latter part of September.

The range of the King Rail is almost confined to the Middle States and it is a bird of the fresh-water marshes. In the salt marshes of the Atlantic coast and that of the Gulf of Mexico, it is replaced by the Clapper Rail (*Rallus crepitans*).

Rallus virginianus Linnæus. **Virginia Rail.***Rallus virginianus* LINNÆUS, S. N., ed. 12, I, 1766, 263.

Popular synonyms: REED-BIRD. RED RAIL.

A common summer resident, nesting about the last of May in the long grass on the borders of our prairie sloughs and lakes. This Rail arrives within our limits about the last of April and departs early in September. Regarding its habits, Mr. E. W. Nelson says:.* "I have obtained nests with eggs from the sixth of May until the middle of June. This species is found in almost any place where it can find suitable food. I have often flushed it in thickets when looking for woodcock, as well as from the midst of large marshes. The nest can rarely be distinguished from that of the Carolina rail in form or structure, and is generally placed in a similar location, with the exception that the present species shows a greater preference for dense tufts of grass. I have never seen more than nine eggs in a nest of this species."

The range of this species includes the whole of temperate North America from the British Possessions south to Guatemala and Cuba. It winters quite throughout its range.

Genus PORZANA Vieillot, 1816.**Porzana carolina** (Linnæus). **Sora.***Rallus carolinus* LINNÆUS, S. N., ed. 10, I, 1758, 153.*Rallus (Crex) carolinus* BONAPARTE, Obs. Wils., 1825, No. 230.*Ortygometra carolina* BONAPARTE, List, 1838, 53.*Porzana carolina* BAIRD, Lit. Rec. & Jour. Linn. Assoc. Penn. Coll., Oct. 1845, 255.

Popular synonyms: CAROLINA RAIL. COMMON RAIL. ORTOLAN. SOBA RAIL.

A common summer resident, breeding abundantly in all of our marshes, and on the borders of prairie sloughs, especially in the southern portion of our area. Their nests are usually built in soft dense grass which grows near the borders of the sloughs. Occasionally the nests are built on clumps of grass which grow where they are entirely surrounded by water. The Sora, as well as the other smaller rails, after being flushed once from the nest is very loth to take wing again and may often be picked up alive by the collector. A great many of these rails are killed during their migrations by flying against the screens which protect the lights of the light-houses on the coasts of the larger bodies of

*Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 1876, 133.

water. They also frequently kill themselves by flying against chimneys and the lighted windows of houses. The Sora arrives within our limits about the middle of April and the larger number leave early in October.

Mr. E. W. Nelson gives an interesting account* of the habits of the Sora in our vicinity: "In the spring of 1875, the sudden rise of the water in the sloughs in this vicinity flooded a great many water birds' nests, and among them Carolina Rail's nests. Visiting the marshes soon after, I found that in every rail's nest that had been flooded the eggs had been broken by the rail piercing the side with her beak. In one instance the bird was found beside the nest, and when I looked at the eggs I found a portion of them broken and the contents still oozing out. I found that the coots (*Fulica americana*) and the gallinules had the same habit when their nests were destroyed by the water, although it was less common with them than with the rail. In autumn great numbers of these birds frequent the floating weeds along the borders of rivers where they are sometimes found in such numbers that several may be killed at a single discharge."

The range of the Sora covers the whole of temperate North America, breeding chiefly in the northern portion of its range.

Porzana noveboracensis (Gmelin). Yellow Rail.

Fulica noveboracensis GMELIN, S. N., I, ii, 1788, 701.

Rallus noveboracensis BONAPARTE, 1827.

Porzana noveboracensis BAIRD, Lit. Rec. & Jour. Linn. Assoc. Penn. Coll., Oct. 1845, 255.

Popular synonyms: LITTLE RAIL. LITTLE YELLOW RAIL.

A quite common summer resident although rarely seen on account of its skulking habits. It may be readily recognized by its white wing patches, the white barring of its back, and its extremely small size. In April, 1889, while collecting with Mr. Charles Robey at South Chicago, two perfect specimens of this species were caught by his dog and brought to us alive and unhurt. It arrives within our limits early in April and departs in September.

The range of the Yellow Rail includes eastern North America, and it is found, though less commonly, west to Utah and Nevada.

Porzana jamaicensis (Gmelin). Black Rail.

Rallus jamaicensis GMELIN, S. N., I, ii, 1788, 718.

*Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 1876, 134.

Porzana jamaicensis BAIRD, Lit. Rec. & Jour. Linn. Assoc. Penn. Coll., 1845, 257.

Popular synonym: LITTLE BLACK RAIL.

A very rare summer resident. Mr. E. W. Nelson says regarding the occurrence of this species in our region:* "During the spring of 1875 I saw three specimens in the Calumet Marshes. The first was observed early in May. On the nineteenth of June, the same season, while collecting with me near the Calumet River, Mr. Frank DeWitt, of Chicago, was fortunate enough to discover a nest of this species containing ten freshly laid eggs. The nest was placed in a deep cup-shaped depression in a perfectly open situation on the border of a marshy spot, and its only concealment was such as a few straggling *carices* afforded. It is composed of soft grass blades loosely interwoven in a circular manner. The nest, in shape and construction, looks much like that of the meadow lark. The eggs are a creamy-white instead of clear white, as I stated in a recent article (Bull. Nutt. Orn. Club, Vol. I, p. 43), and average 1.00 by .81 inches. They are nearly perfectly oval, and are thinly sprinkled with fine reddish-brown dots, which become larger and more numerous at one end. Minute shell markings in the form of dots are also visible. Owing to the small diameter of the nest the eggs were in two layers."

The range of the Black Rail covers North America from Massachusetts, northern Illinois, Nevada and California, southward through Central America and western South America to Chili. It is also found in the West Indies.

Genus **IONORNIS** Reichenbach, 1852.

***Ionornis martinica* (Linnaeus). Purple Gallinule.**

Fulica martinica LINNÆUS, S. N., ed. 12, I. 1766, 259.

Gallinula martinica LATH. 1790.

Porphyrio martinica GOSSE, Birds Jam., 1874, 377.

Ionornis martinica REICHENBACH, Av. Syst., 1852, p. XXI.

Popular synonyms: BLUE COOT. BLUE PETER. BLUE MUD-HEN.

The Purple Gallinule is essentially a southern species, and the only record I have found of its occurrence within our limits is that of a male specimen taken by Mr. C. N. Holden, at Lake View, Chicago, in May, 1886. Mr. E. W. Nelson says that Dr. Hoy informed him of its capture at Racine, Wisconsin.

*Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 1876, 134.

The range of this species includes the whole of tropical and warm-temperate America as far south as Brazil. It is occasionally reported as far north as Maine, New York and Wisconsin.

Genus **GALLINULA** Brisson, 1760.

Gallinula galeata (Licht.). **Florida Gallinule.**

Crex galeata LICHT., Verz. Doubl., 1823, 80, No. 826.

Gallinula galeata BONAPARTE, Amer. Orn., IV, 1832, 128.

Gallinula chloropus (LINNÆUS), var. *galeata* LICHT., of some authors.

Popular synonyms: AMERICAN GALLINULE. MUD-HEN. RED-BILLED MUD-HEN.

A common summer resident in all of our marshes, arriving in April and nesting the middle of May. It builds a cup-shaped nest similar to that of the King Rail, generally placing it among the heavy growth of rushes. The Gallinules usually depart in the fall early in September. Mr. E. W. Nelson gives the following interesting account of their habits within our district:*

"Generally has a full set of eggs, numbering from seven to twelve, the first week in June. Its nests are placed wherever fancy dictates; on low ridges a rod or more from the water; in perfectly bare situations on the borders of marshes, or in the midst of the bulrushes or wild rice growing in several feet of water. The material used varies with the situation, from fine grasses to the coarsest rushes and fragments of wild rice stalks. In the latter case the nest often floats in the water and is held in place by the surrounding reeds. The young possess the usual black down and disproportionate feet of members of this family at an early age, but the basal two-thirds of the bill is bright red, the tip only being yellow. I have placed eggs under a hen, but the young, unless removed as soon as hatched, would scramble out and manage to get away. At this age they have a clear metallic peep, quite unlike that of a chicken."

The range of the Florida Gallinule includes the whole of tropical and temperate America, extending from Canada to Brazil and Chili.

Genus **FULICA** Linnaeus, 1758.

Fulica americana Gmelin. **American Coot.**

Fulica americana GMELIN, S. N., I, ii, 1788, 704.

Fulica wilsoni STEPHENS, Shaw's Gen. Zool., XII, 1824, 236.

*Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 1876, 135.

Fulica atra WILSON, Amer. Orn., IX, 1825, pl. 73, fig. 1, (*nec* Linnæus).
 Popular synonyms: MUD HEN. WHITE-BILLED MUD HEN. CROW
 DUCK.

The American Coots are common summer residents, arriving early in April. They build their nests in reed patches in May. The nests are usually placed in quite exposed situations unlike those of the other species of this family. They are often placed in reeds that stand in two to four feet of water, and are built at about the same time as are those of the Florida gallinule. Where the Coots are plentiful, they gather in quite large numbers as cold weather approaches, and, frequenting the rivers and lakes, remain with us until these waters are frozen over. Mr. E. W. Nelson says regarding the appearance of the Coot within our limits,* "This bird has a curious habit when approached by a boat in a stream, rising often before the boat is within gunshot, and flying directly by the boatman, generally so near that it may be easily brought down. The abundance of ducks and other game birds has caused the birds of this family to be but little molested, until within a few years, when the amateur sportsmen from Chicago, finding the ducks difficult to obtain, and 'mud-hens,' as coots and gallinules are called, conveniently tame, have turned their batteries upon them and have caused a diminution in their numbers about the Calumet Marshes. But in more retired marshes they still breed in undiminished numbers."

The range of the American Coot covers the whole of North America, including the West Indies.

ORDER LIMICOLÆ: SHORE BIRDS.

FAMILY PHALAROPODIDÆ: PHALAROPES.

Genus **CRYMOPHILUS** Vieillot, 1816.

***Crymophilus fulicarius* (Linnæus). Red Phalarope.**

Tringa fulicaria LINNÆUS, S. N., ed. 10, I. 1758, 148.

Phalaropus fulicarius SW. & RICH., Fauna Bor. Amer., II, 1831, 407.

Crymophilus fulicarius STEJNEGER, Auk, II, 1885, 183.

I have found no record of the occurrence of this species within our limits or in the immediate vicinity except that of Mr. E. W. Nelson who says:* "Exceedingly rare. Occurs only during the migrations at about the same time as the preceeding (*Northern Phalarope*)."

*Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 1876, 136.

This Phalarope breeds in very high latitudes, and its range covers the northern portions of the northern hemisphere. It is chiefly maritime and has been reported from as far south as Ohio, Illinois and Cape St. Lucas.

Genus **PHALAROPUS** Brisson, 1760.

Phalaropus lobatus (Linnaeus). Northern Phalarope.

Tringa lobata LINNÆUS, S. N., ed. 10, I, 1758, 148; ed. 12, I, 1766, 249.

Lobipes lobatus B. B. & R., Water Birds N. Amer., I, 1884, 330.

Phalaropus lobatus SALVAD., Ucc. d'Italia, II, 1872, 210 (*nec* Latham qui *Crymophilus fulicarius*, *nec* Wilson qui *Phalaropus tricolor*).

Lobipes hyperboreus CUVIER, Règ. Anim., I, ed. 1829, 532.

A rare spring and fall visitant. In 1901, a male in perfect fall plumage was shot on the grounds of the Calumet Heights Gun Club, by Mr. R. Turtle. I identified this specimen shortly after it was taken. Specimens of immature males were also taken by Mr. Gerard A. Abbott at Calumet Lake, September 27, 1903. Mr. E. W. Nelson says:* "Rather rare migrant the first of May, and the last of September and first of October. Frequents slow streams or marshy pools, where, swimming gracefully from one patch of floating weeds to another, it obtains its food. It is quite gentle and unsuspicious, and I have approached in a boat within five yards of one without its showing the least concern."

The range of the Northern Phalarope includes the northern portions of the northern hemisphere, breeding only in the far north. It winters in the tropics. It is chiefly a maritime species.

Genus **STEGANOPUS** Vieillot, 1819.

Steganopus tricolor Vieillot. Wilson's Phalarope.

Phalaropus lobatus WILSON, Amer. Orn., IX, 1825, 72, pl. 73, fig. 3 (*nec* *Tringa lobata* Linnaeus).

Phalaropus wilsoni SABINE, App. Frankl. Journ., 1823, 691.

Lobipes wilsoni AUDUBON; Synop., 1839, 341.

Steganopus wilsoni COUES, Ibis, April 1865, 158.

Steganopus tricolor VIEILLOT, Nouv. Dict. d'Hist. Nat., XXXII, 1819, 136.

Phalaropus tricolor STEJNEGER, Auk, II, 1885, 183.

A very common summer resident in the Calumet region, appearing about the twelfth of May and nesting almost immediately after arriving. The sites usually selected for the nests are the prairies surrounding the small lakes. The birds depart for

*Birds of Northeastern Illinois. Bull. Essex Inst., Vol. VIII, 1876, 125.

their winter home further south early in August. The female of this species possesses the finest and most brilliant breeding plumage of the two sexes. The male performs nearly or quite all of the work of building the nest and of incubation. It is also smaller than the female. The nest is a very simple affair, and is built with grass in a shallow depression in the ground in open situations where it is but slightly protected by the grass.

The range of this species is chiefly confined to the interior of temperate North America. They breed from Illinois and Utah northward to the Saskatchewan region, and migrate southward in winter as far as Brazil and Patagonia.

FAMILY RECURVIROSTRIDÆ: AVOCETS AND STILTS.

Genus **RECURVIROSTRA** Linnæus, 1758.

Recurvirostra americana Gmelin. **American Avocet.**

Recurvirostra americana GMELIN, S. N., ed. 13, I, 1788, 693.

The only record that I have found concerning the occurrence of this species within our limits or the immediate vicinity, is that of Mr. E. W. Nelson who says:* "A rare migrant. Generally occurs in small parties the last of April and the first of May, and during September and the first of October. Frequents the borders of marshy pools."

The range of this species includes temperate North America and it is much less common in the eastern than in the western United States.

Genus **HIMANTOPUS** Brisson, 1760.

Himantopus mexicanus (Müller). **Black-necked Stilt.**

Charadrius mexicanus MÜLLER, S. N., Suppl., 1776, 117.

Himantopus mexicanus ORD, Wilson's Orn., VII, 1824, 52.

Himantopus nigricollis VIEILLIOT, 1817.

Popular synonyms: LONG-SHANKS. PINK-STOCKINGS. LAWYER. STILT.

Mr. Nelson speaks of this species as being "An exceedingly rare visitant." Mr. Robert Ridgway says:† "While on record only as a summer visitant to Illinois, the Stilt undoubtedly breeds in some portions of the State."

There is really no reason why this species might not be, at least occasionally, found within our limits, for its range includes the whole of temperate North America from the northern

*The Ornithology of Illinois, Vol. II, 1895, 76.

†Birds of Northeastern Illinois. Bull. Essex Inst., Vol. VIII, 1876, 124.

portion of the United States southward to the West Indies and the northern portion of South America.

FAMILY SCOLOPACIDÆ: SNIPES, SANDPIPERS, ETC.

Genus **PHILOHELA** Gray, 1841.

Philohela minor (Gmelin). **American Woodcock.**

Scolopax minor GMELIN, S. N., I, ii, 1788, 661.

Philohela minor GRAY, Genera of Birds, 1841, 90.

Popular synonyms: BOG-SUCKER. MUD-SNIPE. BLIND SNIPE.

Formerly a common summer resident. It is chiefly nocturnal, spending the daytime in the low, damp thickets or heavy growths of willows. In the spring it arrives from about the last of March to the middle of April, and departs in September. It nests the last of April, and its eggs are remarkably large for the size of the bird. Though nests and eggs of the Woodcock are still occasionally found within our limits, the settling of the country with homes and factories, and above all the selfish zeal of collectors and hunters are rapidly driving this interesting bird from our vicinity.

Its range covers eastern North America as far west as Dakota, Nebraska and Kansas, and north to the British Possessions. Its breeding range is coincident with its geographical range.

Genus **GALLINAGO** Leach, 1816.

Gallinago delicata (Ord). **Wilson's Snipe.**

Scolopax gallinago WILSON, Amer. Orn., VI, 1812, 18, pl. 47, fig. 1 (nec Linnæus).

Scolopax wilsoni TEMM., Pl. Col., V, 1824, livr. LXVIII (in text).

Gallinago wilsoni BONAPARTE, 1838.

Scolopax delicata ORD, Wilson's Orn., IX, 1825, p. cexviii.

Gallinago delicata RIDGWAY, in A. O. U. Check List, 1886, 148, No. 230.

Gallinago gallinaria (Gmelin) var. *wilsoni* TEMM., of some authors.

Popular synonyms: AMERICAN SNIPE. COMMON SNIPE. ENGLISH SNIPE. GUTTER SNIPE. JACK SNIPE.

A common spring and fall migrant. There are no recent records of this species having nested within our limits. It is known to have nested not far from our area, and according to both Mr. E. W. Nelson* and Mr. Robert Kennicott† it was formerly a summer resident within our borders. Mr. M.

*Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 1876, 126.

†Trans. Illinois State Agri. Soc., Vol. I, 1853-1854, 587.

Savage found a nest at Grass Lake, Illinois, in May, 1901, which contained four eggs of this species. Mr. Nelson says:* "Mr. T. H. Douglas has obtained its eggs near Waukegan, and while there in the spring of 1876, I found several pairs during the breeding season, in various portions of the marsh near that place." The Snipes arrive within our limits about the last of March, the larger number leaving early in May. In the fall they arrive in September and remain until the ground is frozen over.

The range of Wilson's Snipe includes the whole of North America, the West Indies and the northern part of South America. It breeds north of the United States.

Genus **MACRORHAMPHUS** Leach, 1816.

Macrorhamphus griseus (Gmelin). **Dowitcher.**

Scolopax griseus GMELIN, S. N., I. ii, 1788, 658.

Macrorhamphus griseus LEACH, Syst. Cat. Brit. Mam. & Birds, 1816, 31.

Popular synonyms: GRAY-SNIPE. GRAY-BACK. DOWITCH. ROBIN SNIPE. RED-BREADED JACK. RED-BREADED SNIPE.

A very rare migrant. May the sixth is the earliest recorded spring arrival and September is the latest fall record. A few stragglers may be seen during July and August, principally on the sandy shores of our lakes and small ponds. Mr. E. W. Nelson says:* "Rather common migrant. Passes north, often in large flocks, in May and returns the first of August, and lingers in small numbers about muddy pools until well into October. Quite unsuspicious while feeding and will allow a near approach." Mr. Robert Ridgway says:† "It is apparently more abundant along the Atlantic coast than in the interior, but its presence in Illinois is attested by specimens in the National Museum collection, received from Mr. H. K. Coale, and collected by him near Chicago." I have the following records of the capture of this rare bird:

Frank M. Woodruff, at Liverpool, Indiana, September 2, 1892.

Frank M. Woodruff, at South Chicago, May 6, 1893.

J. Grafton Parker, Jr., at Grand Crossing, July 19, 1893.

The range of the Dowitcher covers eastern North America, breeding in the far north. South in winter to the West Indies and Brazil.

*Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 1876, 126.

†Birds of Illinois, Vol. II, pt. 1, 1895, 39.

Macrorhamphus scolopaceus (Say). **Long-billed Dowitcher.***Limosa scolopacea* SAY, Long's Exp., 11, 1823, 170.*Macrorhamphus scolopaceus* LAWRE, Ann. Lye. N. Y., V, 1852, 4, pl. 1.

Popular synonyms: GREATER LONG-BEAK. ROBIN SNIPE.

A very rare migrant. The only record which I have of the occurrence of this species within our limits, is that of two females in full breeding plumage. These I took at South Chicago, May 6, 1893, and they are in the museum of The Chicago Academy of Sciences.

While the range of the species includes North America in general, it is chiefly confined to that portion of the continent west of the Mississippi River. It breeds in the far north and migrates south in the winter to South America and the West Indies.

Genus **MICROPALAMA** Baird, 1858.**Micropalama himantopus** (Bonaparte). **Stilt Sandpiper.***Tringa himantopus* BONAPARTE, Ann. Lye. N. Y., 11, 1826, 157.*Micropalama himantopus* BAIRD, Birds N. Amer., 1858, 726.*Tringa douglasii* SW. & RICH., Fauna Bor. Amer., II, 1831, 379, pl. 66.

Popular synonyms: LONG-LEGGED SANDPIPER. FROST SNIPE.

A rare spring migrant and often a common fall visitant. Not infrequently this species is not detected, as the young in fall plumage closely resemble the young of the yellow-legs (*Totanus flavipes*). Mr. J. Grafton Parker, Jr., has in his collection an adult female taken from a flock of four at Grand Crossing, Chicago, on July 25, 1893. I also have the following records for the capture of this bird within our limits:

Frank M. Woodruff at South Chicago on June 6, 1890.

J. Grafton Parker, Jr., at Grand Crossing on August 7, 1893.

Frank M. Woodruff at Grand Crossing on September 23, 1893.

Mr. E. W. Nelson says:* "Of rare occurrence. The eighth of August, 1873, I saw a single specimen near the Lake shore in Chicago, and the tenth of September the same year, Mr. R. P. Clarke obtained a specimen at the same place."

The range of the Stilt Sandpiper includes the eastern portion of North America, breeding north of the United States, and migrating in winter south through Central America and quite far south in South America.

*Birds of Northeastern Illinois. Bull. Essex Inst., Vol. VIII, 1876, 126.

Genus **TRINGA** Linnæus, 1758.**Tringa canutus** Linnæus. **Knot.***Tringa canutus* LINNÆUS, S. N., ed. 10, I, 1758, 149.*Tringa cinerea* BRÜNN., Orn. Bor., 1764, 53.

Popular synonyms: ROBIN SNIPE. RED-BREAST. GRAY-BACK. KNOT SANDPIPER.

A rare fall visitant. The only records I have of the taking of this species within our limits, are as follows: One specimen taken August 24, 1896 and four taken August 21, 1897, at Millers, Indiana; and eight taken by Mr. Charles Brandler at Wolf Lake, Indiana, in August, 1897. For some time, I have seen them each year throughout the month of August at Millers, Indiana. Mr. E. W. Nelson says:* "It is not a common but a regular migrant, passing north during May. It returns early in September and remains until October. I have never observed it away from the vicinity of the Lake shore, where it is generally found in company with one or two others of the same family."

The range of the Knot covers the northern hemispheres, though it occasionally visits the southern hemisphere during its migrations.

Genus **ARQUATELLA** Baird, 1858.**Arquatella maritima** (Brünn.). **Purple Sandpiper.***Tringa maritima* BRÜNN., Orn. Bor., 1764, 54.*Arquatella maritima* COUES, Proc. Acad. Nat. Sci. Philadelphia, 1861, 183.

Popular synonym: ROCK SNIPE.

A very rare migrant. In its migrations, it probably will appear in our vicinity at about the same time as the Knot. The only record I have of the appearance of this bird within our limits, is that of Mr. E. W. Nelson, who says:† "A fine adult male obtained on the Lake shore, near Chicago, November 7th, 1871, is in the collection of Dr. J. W. Velie. When first seen it was in company with a flock of sanderlings. This is the only instance of the occurrence of this species of which I have learned."

Its range includes the northeastern portions of North America, breeding very far north and migrating in winter to the middle states, the Great Lakes and the larger rivers of the Mississippi Valley.

Genus **ACTODROMAS** Kaup, 1829.**Actodromas maculata** (Vieillot). **Pectoral Sandpiper.***Tringa maculata* VIEILLOT, Nouv. Dict. d'Hist. Nat., XXXIV, 1819, 465.

*Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 1876, 126.

†Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 1876, 128.

Actodromas maculata COUES, Proc. Acad. Nat. Sci. Philadelphia, 1861, 197, 230.

Tringa pectoralis SAY, Long's Exp. I. 1823, 171.

Popular synonyms: JACK SNIPE. GRASS SNIPE. MARSH PLOVER. MEADOW SNIPE. MAY PLOVER. SAND SNIPE. CREAKER.

An abundant migrant. During its season with us, it may be found on all of our lakes and sloughs and on plowed fields. Its season in our vicinity is from the first of April to the middle of May, and from the last of July until late in October.

This Sandpiper has an extensive range covering the whole of North America and the greater part of South America. It breeds in the Arctic regions.

***Actodromas fuscicollis* (Vieillot). White-rumped Sandpiper.**

Tringa fuscicollis VIEILLOT, Nouv. Dict. d'Hist. Nat., XXXIV, 1819, 461.

Tringa schinzii BONAPARTE, Synop., 1828, 249.

Tringa bonapartei SCHLEG., Rev. Crit. Ois. Europe, 1844, 89.

Actodromas fuscicollis BONAPARTE, Comptes Rendus, XLIII, 1856, 596.

Popular synonyms: WHITE-TAILED STILT. BONAPARTE'S SANDPIPER.

A very rare migrant. There seem to be no records of the occurrence of this species within our limits excepting that of Mr. E. W. Nelson, who says:* "Dr. Hoy writes 'that it was formerly abundant during the migrations but is now rare' (at Racine). June 9th, 1876, I obtained one specimen and saw quite a number of others upon the Lake shore near Waukegan. Mr. R. P. Clarke informs me that he has taken it late in autumn upon the Lake-shore near Chicago." These records and the fact that I have taken it at Meredosia, Illinois, would indicate beyond a doubt the possibility of its passing through our area during its migrations.

This species breeds in the far north, and its geographical range includes eastern North America, south in winter to the West Indies, Central and South America.

***Actodromas bairdii* COUES. Baird's Sandpiper.**

Actodromas bairdii COUES, Proc. Acad. Nat. Sci. Philadelphia, 1861, 194.

Tringa bairdii SCH., P. Z. S. 1867, 332.

A rare migrant, visiting us in August or September in company with other maritime species. In 1876, Mr. E. W. Nelson published the following report:* "A rather uncommon migrant during the middle of May, and the last of August and first of September. It is generally found in small parties or singly, with

*Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 1876, 127.

other species of sandpipers, but it sometimes occurs in large flocks." I have the following records for the taking of this species within our limits:

Mr. J. Grafton Parker, Jr., at Grand Crossing, on August 22, 1893.

Frank M. Woodruff, at Millers, Indiana, on August 24, 1896.

The range of this species includes nearly the whole of both North and South America, but chiefly the interior of North and the western portion of South America as far south as Chili and Patagonia. It breeds in the far north.

Actodromas minutilla (Vieillot). Least Sandpiper.

Tringa minutilla VIEILLOT, Nouv. Dict. d'Hist. Nat., XXXIV, 1819, 466.

Actodromas minutilla COUES, Proc. Acad. Nat. Sci. Philadelphia, 1861, 191.

Tringa pusilla WILSON, Amer. Orn., V, 1813, 32, pl. 37, f. 4 (nec LINNÆUS).

Tringa wilsonii NUTTALL, Man., II, 1834, 121.

Popular synonyms: SAND SNIPE. PREP. WILSON'S SANDPIPER. BUMBLEBEE.

An abundant migrant, arriving early in April and returning again in the fall in August or September. I have no records of the Least Sandpipers having nests within our limits excepting that of Mr. E. W. Nelson, who says:* "The fifth of June, 1875, I found one of these birds building its nest near the Calumet River. When first observed it was busily at work in the midst of a small bunch of grass, but upon my approach it ran a few feet to one side and watched my movements. The nest was nearly finished, and was a shallow depression in the center of a tuft of grass, formed by the bird, which had just commenced lining it with small straws. Unfortunately work was not resumed upon the nest after my visit, but the birds were noticed several times in the vicinity, and they probably had a nest in some safer spot. Several Least Sandpipers were observed near Waukegan the first of July, 1875, by Mr. Rice, who is certain they had nested in the vicinity."

The range of the Least Sandpiper includes the whole of North and South America, and it breeds chiefly north of the United States.

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 127.

Genus **PELIDNA** Cuvier, 1817.**Pelidna alpina sakhalina** (Vieillot). **Red-backed Sandpiper.**

Tringa alpina WILSON, Amer. Orn., VII, 1813, 25, pl. 56, fig. 2 (*nec* Linnaeus).

Scelopar sakhalina VIEILLLOT, Nouv. Dict. d'Hist. Nat., III, 1816, 359, (cf. Buttrlin, Auk, XXI, 1904, 53).

Tringa alpina var. *americana* CASS., in Baird's Birds N. Amer., 1858, 719.

Pelidna alpina americana RIDGWAY, Proc. U. S. Nat. Mus., 1881, 200.

Pelidna pacifica COUES, Proc. Acad. Nat. Sci. Philadelphia, 1861, 189.

Pelidna alpina pacifica STEJNEGER, Bull. U. S. Nat. Mus., VIII, 1885, 120.

Pelidna alpina pacifica RIDGWAY, in A. O. U. Check List, 1886, No. 143a.

Popular synonyms: **RED-BACKED SNIPE**. **DUNLIN**.

A common spring and fall migrant. It is usually seen along the sandy shores of the small lakes and pools of our area. The earliest spring arrival, in my records, is the seventeenth of May, and the latest fall record the twentieth of October.

Its range covers North America in general, breeding far north.

Genus **EREUNETES** Illiger, 1811.**Ereunetes pusillus** (Linnaeus). **Semipalmated Sandpiper.**

Tringa pusilla LINNÆUS, S. N., ed. 12, I, 1766, 252.

Tringa semipalmata WILSON, Amer. Orn., VII, 1813, 131, pl. 63, fig. 3.

Ereunetes pusillus CASS., Proc. Acad. Nat. Sci. Philadelphia, XIII, 1860, 195.

Popular synonyms: **PEEP**. **SAND SNIPE**. **OX-EYE**.

A common migrant, occurring in about equal numbers with *Actodromas minutilla*. Its spring and fall occurrence within our limits is at about the same time as that of the Red-backed Sandpiper. Mr. E. W. Nelson gives the following note:* "Very abundant migrant and may remain through the summer. From repeated dissections I am confident these are barren birds and, as Mr. Maynard suggests, probably young of the preceding year."

This species breeds in the far north and its range covers at least the whole of eastern North America, migrating southward in winter to the West Indies, Central America and South America.

Genus **CALIDRIS** Cuvier, 1799-1800.**Calidris arenaria** (Linnaeus). **Sanderling.**

Tringa arenaria LINNÆUS, S. N., ed. 12, I, 1766, 251.

Calidris arenaria LEACH, Syst. Cat. Brit. Mam. & Birds, 1816, 28.

Popular synonym: **WHITE SNIPE**.

*Bull. Essex Inst., Vol. VIII, p. 126, 1876.

This is a rather common species with us through the months of August, September and October, when it may be seen along the shore of Lake Michigan. About one-third of the specimens which I have taken at Millers, Indiana, were in their breeding plumage. Mr. E. W. Nelson says:* "Arrives in full breeding plumage—which varies greatly with individuals—about the twentieth of May, and is found in flocks, numbering from five to seventy-five, along the shore, until June tenth. Returns the first of August, still wearing its breeding dress, which is changed the last of the month for the duller garb of winter."

This species is nearly cosmopolitan in its range, breeding only in the Arctic and Subarctic districts. In America, it migrates southward to Chili and Patagonia.

Genus **LIMOSA** Brisson, 1760.

Limosa hæmastica (Linnæus). **Hudsonian Godwit.**

Scolopax hæmastica LINNÆUS, S. N., ed. 10, I, 1758, 147.

Limosa hæmastica COUES, Birds Northwest, 1874, 760.

Scolopax hudsonica LATHAM, Ind. Orn., II, 1790, 720.

Limosa hudsonica SW. & RICH., Fauna Bor. Amer., II, 1831, 396.

A rare migrant. I have observed this bird but once in Cook County. I took a fine pair in June, 1892, at Grass Lake, Illinois. This species, as well as others of our large waders, has become very scarce within our limits. On September 15, 1898, a fine male adult was taken at Wolf Lake, Indiana, by Mr. Charles Brandler. Mr. E. W. Nelson says, regarding the frequency of the occurrence of this species in our vicinity during earlier years: "Not very rare during migrations. April fifteenth to May tenth, and September to the first of October. More common along the water courses in the western part of the state."

This Godwit breeds in the far north, and its range covers eastern North America and the whole of Central and South America.

Genus **TOTANUS** Bechstein, 1803.

Totanus melanoleucus (Gmelin). **Greater Yellow-legs.**

Scolopax melanoleuca GMELIN, S. N., I, ii, 1788, 659.

Totanus melanoleucus VIELLOT, Nouv. Dict. d'Hist. Nat., VI, 1816, 398.

Popular synonyms. STONE SNIPE. TELL-TALE. YELPER. BIG YELLOW-LEGS. ENGLISH SNIPE.

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 128.

A common migrant. I have observed stragglers early in May, and some years as late as the last of July but I have never seen them throughout the months of May and June, neither have I been able to find any observer who has done so within recent years. I should consider the nesting of this species in our region of equally rare occurrence with that of Wilson's Snipe (*Gallinago delicata*). Mr. E. W. Nelson says: * "Arrives about the middle of April, the larger portion passing north early in May. Returns September first and remains until the last of October. In June, 1875, I found several pairs of these birds about the Calumet Marshes, where, from their actions, I was certain they were breeding, but was not fortunate enough to find their nests. The tenth of June, 1876, Mr. Rice observed a pair about a prairie slough near Evanston. A few days later a set of four eggs were brought him from a similar situation a few miles northwest of that place, and from the description of the parent bird—driven from the nest—he decided they must belong to this species. I perfectly agree with Mr. Rice's decision, for the prominent characteristics noticed by the collector are obviously applicable to this bird."

The range of this species covers America in general, breeding only in the cold-temperate and subarctic regions of the northern continent. It is known to have nested as far south as northern Iowa and Illinois. It winters as far south as Chili and the Argentine Republic.

Totanus flavipes (Gmelin). Yellow-legs.

Scelopax flavipes GMELIN, S. N., I, ii, 1788, 659.

Totanus flavipes VIEILLOT, Nouv. Diet. d'Hist. Nat., VI, 1816, 410.

Popular synonyms: LESSER or LITTLE YELLOW-LEGS. LESSER TELL-TALE.

A common migrant. This species is essentially a miniature of the Greater Yellow-legs, but it occurs in greater numbers within our limits, and it is also more gregarious, frequently being found in quite large flocks. This species passes through our region on the way to its breeding grounds about the first of April, and returning in July it remains with us until the latter part of September. I have no records of its breeding within our limits. Mr. E. W. Nelson says: † "A few breed. I obtained the young, barely able to fly, near a prairie slough the first of July, 1874, a few miles from Chicago, and have since

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 128.

†Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 129.

observed several pairs during the breeding season about the Calumet Marshes."

While the range of this species includes the whole of America, it is much more common in eastern than in western North America. It breeds in the cold temperate and subarctic regions of the northern continent, and winters as far south as the southern portion of South America.

Genus **HELODROMAS** Kaup, 1829.

Helodromas solitarius (Wilson). **Solitary Sandpiper.**

Tringa solitaria WILSON, Amer. Orn., VII, 1813, 53, pl. lviii, fig. 3.

Totanus solitarius BONAPARTE, Jour. Acad. Nat. Sci. Philadelphia, V, 1825, 86.

Totanus chloropygius VIEILLLOT, Nouv. Dict. d'Hist. Nat., VI, 1816, 40.

Rhyacophilus solitarius CASS., in Baird's Birds N. Amer., 1858, 733.

Helodromas solitarius SHARPE, Cat. Bds. B. M., XXIV, 1896, 444.

Popular synonyms: PEET-WHEET. WOOD SNIPE. TIP-UP. TATTLEB.

POND TILTUP. TEETER. SOLITARY TATTLEB.

A common migrant. I feel quite certain that a number may nest within our limits for I have observed adults in Cook County throughout the summer. I can find no records which show that the eggs of this species have ever been taken within our area. The Solitary Sandpipers arrive early in April, the majority soon passing farther north. In the fall, they leave our vicinity in September. Mr. E. W. Nelson says:* "I have several times taken young of this species just able to fly, and have observed the adults throughout the breeding season. I do not think there is the slightest doubt of its breeding in this vicinity."

The range of the Solitary Sandpiper covers the whole of North and Central America and a large portion of South America; it at least migrates as far south as the Argentine Republic. It breeds chiefly north of the United States.

Genus **SYMPHEMIA** Rafinesque, 1819.

Symphemia semipalmata inornata Brewster. **Western Willet.**

Symphemia semipalmata inornata BREWSTER, Auk, IV, April, 1887, 145.

Totanus semipalmatus TEMM. (in part) of some authors.

Symphemia semipalmata GMELIN (in part) of some authors.

A quite common migrant along the lake shore from the first of August to the fifteenth of September. Occasionally this

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 129.

species is also seen late in April or early in May, but at that time they are very shy. The fall birds being the young of the year are usually quite tame. Nearly all the records of the occurrence of this species in our vicinity have been published under the specific name *semipalmata*. It is probable that all of these records referred to the subspecies *inornata*.

The range of this species includes western North America, eastward to the Mississippi Valley and the Gulf States. It winters in the southern states and Mexico.

Genus **BARTRAMIA** Lesson, 1831.

Bartramia longicauda (Bechstein). **Bartramian Sandpiper.**

Tringa longicauda BECHSTEIN, Uebers. Lath. Ind. Orn., II, 1812, 453.

Tringa bartramia WILSON, Amer. Orn., VII, 1813, 63, pl. 59, fig. 2.

Totanus bartramius TEMM, 1820.

Actiturus bartramius BONAPARTE, 1831.

Bartramius longicaudus BONAPARTE, Rev. et. Mag. Zool., XX, 1857, 59.

Bartramia longicauda COUES, Bull. Nutt. Orn. Club, April, 1880, 100.

Popular synonyms: FIELD OR PRAIRIE PLOVER. BARTRAMIAN TATTLER. UPLAND PLOVER.

A common summer resident, arriving early in April and nesting from the last of April to the middle of May. It leaves our vicinity about the last of October. It frequents the borders of sloughs, marshes and prairies. Mr. E. W. Nelson has published the following note:* "Quite difficult to approach when it first arrives, but during the breeding season becomes perfectly reckless, and hovers over head or follows through the grass within a few yards until it has escorted the intruder well off its domain. The presence of a dog in the vicinity of its nesting place is the signal for a general onslaught by all the birds of the vicinity, which hover over the dog, and with loud cries endeavor to drive it away. Being but little appreciated as game it is seldom hunted in this vicinity."

The range of this species includes North America but chiefly east of the Rocky Mountains. It breeds nearly throughout its North American range and winters as far southward as Brazil and Peru.

Genus **TRYNGITES** Cabanis, 1856.

Tryngites subruficollis (Vieillot). **Buff-breasted Sandpiper.**

Tringa subruficollis VIEILLOT, Nouv. Diet. d'Hist. Nat., XXXIV, 1819, 465.

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 129

Tringa rufescens VIEILLLOT, Nouv. Diet. d'Hist. Nat., XXXIV, 1819, 470.

Tryngites rufescens CABANIS, J. f. O., 1856, 418.

Tryngites subruficollis RIDGWAY, Proc. U. S. Nat. Mus., VIII, 1885, 356.

A very rare migrant. I have been able to find but three records of its occurrence within our limits. Mr. Henry K. Coale captured a specimen in September, 1873, at Chicago. In April, 1890, I obtained an adult in breeding plumage which was flying with a large flock of Golden Plover (*Charadrius dominicus*) at Worth, Illinois. Mr. E. W. Nelson says:* "Very rare migrant. A specimen is in the collection of Mr. R. P. Clarke, obtained upon the Lake shore, at Chicago, September 4th, 1873." There is an interesting notation regarding the frequency of this species in Dr. P. R. Hoy's "Notes on the Ornithology of Wisconsin."† With a few exceptions, these notes were based on personal observations made by Dr. Hoy within fifteen miles of Racine, Wisconsin. Racine is but a few miles north of the northern boundary of our limits. He speaks of the Buff-breasted Sandpiper as "Quite common from September 15th to October 10th. Never met in the spring." I am sure that there must be some mistake in Dr. Hoy's record. Even in 1876, not many years after Dr. Hoy's observations were made, Mr. Nelson was unable to confirm the report and stated that he thought an error had been made in the record.

The range of this Sandpiper covers North America though it is more common in the interior. It breeds chiefly in the interior of British America and in the Yukon district. In winter it passes through South America as far as Uruguay and Peru.

Genus **ACTITIS** Illiger, 1811.

Actitis macularia (Linnæus). **Spotted Sandpiper.**

Tringa macularia LINNÆUS, S. N., ed. 12, I, 1766, 249.

Totanus macularius TEMM. 1815.

Actitis macularia NAUMANN, Vög. Deutschl., VIII, 1836, 34.

Tringoides macularius GRAY, 1849.

Popular synonyms: SAND SNIPE. RIVER SNIPE. PEET-WEET. TIP-UP. SAND LARK.

A very common summer resident and most abundant along the lake shore, where it nests on the drift or under small bushes growing on the sand dunes. This species also nests in thin tufts of grass, and not infrequently the eggs are so exposed that

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 130.

†Trans. Wisc. State Agri. Soc., Vol. II, 1852, 360.

they may be seen at a distance of several feet. These Sandpipers arrive late in April and after nesting depart for their winter home about the last of September.

The range of the Spotted Sandpiper is extensive, covering the whole of North America and South America as far as the northern portion of Brazil. It breeds throughout temperate North America.

Genus **NUMENIUS** Brisson, 1760.

Numenius longirostris Wilson. **Long-billed Curlew.**

Numenius longirostris WILSON, Amer. Orn., VIII, 1814, 24, pl. 64, fig. 4.

Popular synonyms: SICKLE-BILL. BIG CURLEW. SICKLE-BILL SNIPE or CURLEW.

A very rare migrant. Mr. J. Grafton Parker, Jr., informs me that he once observed a pair of these Curlews on the beach of Lake Michigan near Woodlawn Park, Chicago. Mr. E. W. Nelson says:* "Formerly very abundant during the migrations, and a common summer resident. Now (1876) rather uncommon in the migrations and a very rare summer resident. A pair nested on the Calumet Marshes the spring of 1873. More numerous on the large marshes in Central Illinois. Arrives the last of April and departs in October." Mr. Robert Ridgway says:† "Transient in most localities. Formerly bred throughout the state, in suitable localities, and still does so in the central and northern districts. Occasionally winters in the extreme southern counties."

The range of the Long-billed Curlew includes temperate North America in winter south to Guatemala and Cuba. It breeds quite throughout its North America range, but chiefly in the south Atlantic states.

Numenius hudsonicus Lath. **Hudsonian Curlew.**

Numenius hudsonicus LATH., Ind. Orn., II, 1790, 712.

Numenius intermedius NUTTALL, Man., II, 1834, 100.

Popular synonyms: SHORT-BILLED CURLEW. JACK CURLEW.

A very rare or occasional migrant. A fine specimen of this species was sent to me for identification by Mr. R. A. Turtle, who shot the bird at Calumet Heights, Indiana, on August 3, 1902. I have seen this species in great numbers on Galveston Island in the spring and fall. In 1876, Mr. E. W. Nelson re-

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 130.

†Revised Cat. of the Birds Ascertained to Occur in Illinois, 1881, 196.

ported the Hudsonian Curlew to be a "very rare migrant," and appearing with the Long-billed Curlew.* Mr. Robert Ridgway reports this species as much rarer in Illinois than the long-billed species, and says, it "never remains within the State during the breeding season."†

Its range includes the whole of both North and South America and the West Indies. It breeds very far north and winters chiefly south of the United States.

Numenius borealis Forster. **Eskimo Curlew.**

Scotopax borealis FORSTER, Phil. Trans., LXII, 1772, 411, 431.

Numenius borealis LATH., Ind. Orn., II, 1790, 712.

Popular synonyms: LITTLE CURLEW. DOUGH-BIRD.

As shown by records, this species was formerly a common migrant, but at the present time it is certainly a very rare migrant. Mr. Robert Kennicott, in his "Catalogue of Animals observed in Cook County, Illinois,"|| reports the Eskimo Curlew simply with the notation "common." This note, however, becomes of little value, for Mr. Kennicott lists the bird under the common name "Esquimaux Curlew" and gives the scientific name "*Numenius Hudsonicus*." I am not aware that *hudsonicus* has ever been called Eskimo (or Esquimaux) Curlew, though the two species have been somewhat mixed by earlier writers.

Its range extends over the whole of eastern North America, breeding in the Arctic regions and in its migrations reaching the southern extremity of South America.

FAMILY CHARADRIIDÆ: PLOVERS.

Genus **SQUATAROLA** Cuvier, 1817.

Squatarola squatarola (Linnaeus). **Black-bellied Plover.**

Tringa squatarola LINNÆUS, S. N., ed. 10, I, 1758, 149.

Tringa helvetica LINNÆUS, S. N., ed. 12, I, 1766, 250.

Squatarola squatarola CUVIER, Règne Anim., I, 1817, 467.

Charadrius squatarola NAUM., Vög. Deutschl., VII, 1834, 250.

Charadrius helveticus LICHT.—NUTTALL, Man., II, 1834, 26.

Squatarola helvetica "CUVIER," of several authors.

Popular synonyms: BEETLE-HEAD. BULL-HEAD. OX-EYE. BOTTLE-HEAD. BLACK-BREAST, etc.

This fine bird is now a quite rare migrant. I have always found it in company with other maritime species. I have taken an adult specimen in full breeding plumage in August.

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 130.

†Birds of Illinois, Vol. II, pt. I, 1895, 72.

||Trans. Illinois State Agri. Soc., Vol. I, 1853-1854, 588.

which is a rather unusual occurrence. Mr. E. W. Nelson says:* "Not uncommon during the migrations. Arrives in full breeding plumage the last of May and after lingering a few days the majority pass north. A few remain during the summer and undoubtedly breed. Returning early in September in fall plumage, they remain until well into October. While with us in the migrations this species is generally solitary, sometimes a half dozen individuals joining company, or a single specimen will be found leading a miscellaneous company of sandpipers and small plovers."

While the Black-bellied Plover is nearly cosmopolitan in its distribution, it is chiefly confined to the northern hemisphere and breeds in the far north. In winter, in America, it migrates as far southward as the West Indies, Brazil and Colombia.

Genus **CHARADRIUS** Linnæus, 1758.

Charadrius dominicus Müller. **American Golden Plover.**

Charadrius dominicus MÜLLER, Syst. Nat. Suppl., 1776, 116.

Charadrius pluralis WILSON, Amer. Orn., VII, 1813, 71 (*nec* Linnæus).

Charadrius marmoratus WAGL., Syst. Av., 1827, No. 42.

Charadrius fulvus var. *virginicus* COUES, Key, 1872, 243.

Popular synonyms: GREEN PLOVER. BULL-HEAD. PRAIRIE PIGEON.

A common migrant. The Golden Plovers are rarely seen in their full breeding plumage unless taken in May. They arrive within our limits about the middle of April and remain, frequenting the wet prairies, during the remainder of the month, when the majority pass on to their northern breeding grounds, a few staying with us during the first week in May. They return to us the last of August and remain until some time in October.

The range of this species includes both North and South America; breeding in Arctic regions it migrates southward to Patagonia.

Genus **OXYECHUS** Reichenbach, 1853.

Oxyechus vociferus (Linnæus). **Killdeer.**

Charadrius vociferus LINNÆUS, S. N., ed. 10, I, 1758, 150.

Ægialitis vociferus BONAPARTE, Geog. & Comp. List, 1838, 45.

Oxyechus vociferus REICHENBACH, Syst. Av., 1853, XVIII.

Ægialitis vocifera Amer. Orn. Union Check List, 1895, No. 273.

Popular synonyms: KILL-DEE. KILLDEER PLOVER. TELL-TALE.

A common summer resident, arriving from the last of March to the last of April and remaining with us until the cold weather

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 122.

sets in. Occasional stragglers may be seen during a period of warm days in the winter.

Its range includes the whole of temperate North America, south in winter to Central America and northern South America.

Genus **ÆGIALITIS** Boie, 1822.

Ægialitis semipalmata (Bonaparte). **Semipalmated Plover.**

Charadrius semipalmatus BONAPARTE, Journ. Acad. Nat. Sci. Philadelphia, V, 1825, 98.

Ægialites semipalmatus BONAPARTE, Geog. & Comp. List, 1838, 45.

Popular synonyms: AMERICAN RING PLOVER. RING-NECK. BEACH BIRD.

A common migrant. On their northward migration, these Plovers pass our vicinity early in May, though a few may straggle along until the end of the month. They return to us again the latter part of July and remain until the latter part of October. Mr. E. W. Nelson says:* "The second of July, 1873, I obtained several specimens of this species near Chicago. From the condition of the abdomen and ovaries of one specimen, and the presence of several recently fledged young, I came to the conclusion that they had nested in the vicinity. It is barely possible, however, that these birds were unusually early arrivals from more northern breeding grounds, although the arrivals from the north generally begin about the last of the month. My suspicions that the species either breeds in this state, or at no far distant point, were strengthened the following season when several females examined the last day of May contained eggs which would have been deposited within a short time." The following record is of some value as indicative of the possibility of this species nesting not very far from our area. Mr. Frank C. Baker, Curator of the Academy, and myself observed a flock of eight adults at Worth, Illinois, June 20, 1894.

The range of this species may be given as North America in general, breeding in Arctic and subarctic regions and migrating in winter through the tropical countries to Brazil and Peru.

Ægialitis meloda (Ord). **Piping Plover.**

Charadrius melodus ORD, ed. Wils., VII, 1824, p. 71.

Ægialites melodus BONAPARTE, Geog. & Comp. List, 1838, p. 45.

Ægialites melodus var. *circumcinctus* RIDGWAY, Amer. Nat., VIII, Feb. 1874, 109.

Popular synonyms: RINGED PIPING PLOVER. WHITE RING-NECK. WESTERN PIPING PLOVER. BELTED PIPING PLOVER.

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 123.

This species was formerly a common but is now a rare summer resident. On the first of August, 1897, while collecting along the shore of Lake Michigan at Millers, Indiana, I was so fortunate as to obtain adults and young in down of this bird. On the thirteenth of June, 1902, I obtained a set of four eggs and the parent birds at Millers, Indiana. (See plate VII.) These are now on exhibition as a group in the Museum of The Chicago Academy of Sciences. At the time of writing, June 10, 1904, I know of two pairs of these Plovers which are breeding within our limits, having located their nests and eggs. I do not doubt that there are other pairs nesting in the same vicinity, and I sincerely hope that the nests and eggs of these rare residents of our area may never be found by unscrupulous collectors. That this Plover was much more common some years ago is well shown by the following statement of Mr. E. W. Nelson.* "Very common summer residents along the Lake Shore, breeding on the flat, pebbly beach between the sand dunes and shore. Arrives the middle of April and proceeds at once to breeding." At Waukegan, a few miles north of our limits, he found evidences of their breeding as early as the twenty-fourth of April. He also adds: "Some thirty pairs were breeding along the beach at this place, within a space of two miles, and I afterwards found the birds as numerous at several points along the shore. Every effort was made to discover their nests without success, although the birds were continually circling about or standing at a short distance uttering an occasional note of alarm. The first of July, the year previous, Dr. Velie obtained young but a very few days old, at this same locality, showing that there is considerable variation in the time of breeding. This was also shown by specimens obtained the last of May,—and which I think were later arrivals than those found breeding in April,—having the ova just approaching maturity."

This species ranges over eastern North America west to the Mississippi Valley and the adjacent portions of the interior of North America. It breeds from Illinois and Virginia northward to Lake Winnipeg and Newfoundland. It winters in the West Indies. According to Mr. Allen, the race *circumcincta* (Belted Piping Plover) is not now recognized.

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 123.

FAMILY APHRIZIDÆ: SURF BIRDS AND TURNSTONES.

Genus **ARENARIA** Brisson, 1760.**Arenaria interpres** (Linnaeus). Turnstone.*Tringa interpres* LINNÆUS, S. N., ed. 10, I, 1758, 148.*Strepsilas interpres* ILLIGER, Prodr., 1811, 263.*Arenaria interpres* VIEILLOT, Nouv. Dict. d'Hist. Nat., XXIV, 1819, 345.

Popular synonyms: CALICO-BACK. BRANT BIRD.

A rare migrant which may be looked for from June to about the middle of September. It is almost invariably found in company with other maritime species along the sandy shores of Lake Michigan and of our smaller lakes. I have on several occasions seen adult birds in full breeding plumage. One taken at Millers, Indiana, on the eighth of August, 1897, was in exceptionally rich plumage. Regarding this species, Mr. E. W. Nelson wrote* in 1876 that it was a "common migrant along Lake Michigan. Arrives May 15th in full breeding plumage and is found until the first week in June. Returns early in August, still in breeding plumage, which is exchanged for that of winter during the last of the month. Departs about the twentieth of September."

ORDER GALLINÆ: GALLINACEOUS BIRDS.

FAMILY TETRAONIDÆ: GROUSE, PARTRIDGES, ETC.

Genus **COLINUS** Goldfuss, 1820.**Colinus virginianus** (Linnaeus). Bob-white.*Tetrao virginianus* LINNÆUS, S. N., ed. 10, I, 1758, 161.*Perdix virginiana* LATH., Ind. Orn., II, 1790, 650.*Ortyx virginianus* JARD., Nat. Lib. Birds, IV, 101, pl. 10.*Colinus virginianus* STEJNEGER, Auk, II, Jan, 1885, 45.

Popular synonyms: QUAIL. PARTRIDGE. AMERICAN QUAIL. VIRGINIA QUAIL.

Formerly the Bob-white was an abundant resident within our limits, but it is now rare in this vicinity excepting possibly the northern portion of Lake County, Illinois. It is to be regretted that this valuable bird, which devours innumerable insect pests and is so easily fostered, should have been driven from this locality, chiefly by unscrupulous hunters but also by severe winters in earlier years.

The range of the Bob-white covers eastern North America from Ontario to the Gulf of Mexico and westward to the Great

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 123.

Plains. Of late years the range has been gradually extended westward along the lines of railroads, and it has been introduced into many of the western states, including California, Oregon and Washington.

Genus **BONASA** Stephens, 1819.

Bonasa umbellus (Linnaeus). **Ruffed Grouse.**

Tetrao umbellus LINNÆUS, S. N., ed. 12, 1, 1766, 275.

Bonasa umbellus STEPHENS, Gen. Zool., XI, 1819, 300.

Popular synonyms: PARTRIDGE. RUFFLED GROUSE. PHEASANT. DRUMMING GROUSE.

In 1876, when Mr. E. W. Nelson prepared his report* on the Birds of Northeastern Illinois, and for many years thereafter, this species was a common resident, frequenting the timbered sections of our area. They are still occasionally met with in Lake County, Indiana. Major Bendire quotes the following observations of Mr. Manly Hardy, of Brewer, Maine, as a reliable description of the method of drumming of the Ruffed Grouse: "The cock Grouse usually selects a mossy log, near some open hedge, clearing or wood-road, and, partly screened by bushes, where he can see and not be seen. When about to drum, he erects his neck feathers, spreads his tail, and, with drooping wings, steps with a jerking motion along the log some distance each way from his drumming place, walking back and forth several times, and looking sharply in every direction; then, standing crosswise, he stretches himself to his fullest height, and delivers the blows with his wings fully upon his sides, his wings being several inches clear from the log. After drumming, he settles quietly down into a sitting posture and remains, silently listening for five or ten minutes, when, if no cause of alarm is discovered, he repeats the process."

In 1886, while collecting on the summit of the Alleghanies near Eagle rock, five miles from Deer Park, Maryland, I flushed a whip-poor-will at the base of a large fallen log which was almost entirely hidden from sight among the rhododendron bushes. As I was examining the nest of the whip-poor-will, it was my good fortune to hear the soft call of a hen Ruffed Grouse and then a note which I did not recognize as the drumming of the male, as it was softer and seemed quite unlike the sound of the drumming when heard at a distance. I remained

*Bull. of the Essex Institute, Vol. VIII, 1876, 121.

perfectly quiet and the bird soon appeared with a slow measured step, with its tail spread, and with its wings lowered to within two or three inches of the log but never allowed to touch it. Its head was not depressed nor was its tail held as far forward as is the case in the strutting of the turkey cock. As he turned he slightly lowered his feathers and tail, and retraced his steps to the other end of the log strutting as before. The drumming seemed to be produced by one long beat and two short spasmodic ones.

The range of the Ruffed Grouse includes the eastern United States from Georgia and Arkansas northward into southern Canada, and westward to the Great Plains.

Genus **LAGOPUS** Brisson, 1760.

Lagopus lagopus (Linnæus). **Willow Ptarmigan.**

Tetrao lagopus LINNÆUS, S. N., ed. 10, I, 1758, 159.

Tetrao saliceti TEMM., Man., II, 1820, 474.

Lagopus albus AUDUBON, Synop., 1839, 207.

Lagopus lagopus STEJNEGER, Proc. U. S. Nat. Mus., VIII, 1885, 20.

Popular synonyms: **WHITE PTARMIGAN. WILLOW GROUSE.**

It is very doubtful if this species should be included in the fauna of our area. It is done because of the following published notes. In his "Catalogue of Animals observed in Cook County, Illinois,"* Mr. Robert Kennicott records this species with the comment "Sometimes found in the timber along Lake Michigan." Regarding Mr. Kennicott's note, Mr. E. W. Nelson says:† "This note was based I think, upon the capture of two specimens, December, 1846, near Racine (Wisconsin), as noted by Dr. Hoy (Wis. Agr. Rep., 1852)."

The A. O. U. Check-list gives the following as the geographical range of this Ptarmigan: "Arctic regions; in America south to Sitka and the British Provinces. Accidental in New England (Bangor, Maine, and Essex County, Massachusetts)."

Genus **TYMPANUCHUS** Gloger, 1842.

Tympanuchus americanus (Reichenbach). **Prairie Hen.**

Tetrao cupido WILSON, Amer. Orn., III, 1811, 104, pl. 27 (*nec* Linnæus).

Cupidonia cupido BAIRD, Birds N. Amer., 1838, 628.

Cupidonia americanus REICHENBACH, Syst. Av., 1852, p. xxix.

Tympanuchus americanus, RIDGWAY, Auk, Jan., III, 1886, 133.

Popular synonyms: **PRAIRIE CHICKEN. PINNATED GROUSE.**

*Trans. Illinois State Agri. Society, Vol. I, 1853-1854, 586.

†Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 122.

Formerly an abundant resident, but now fast disappearing. They are still occasionally found in the western portion of Cook County, Illinois, and in Lake County, Indiana. Mr. E. W. Nelson wrote in 1876:† "Once excessively abundant; now rather scarce within thirty miles of Chicago. Still exists in large numbers on the larger prairies, but is becoming much less numerous in all the more settled districts. In many places the farmers are in the habit of collecting their eggs by the pailful to use for culinary purposes. Such a drain as this, with the annual slaughter by sportsmen, and the restriction of their breeding grounds by cultivation, is rapidly lessening their numbers except in the remote prairie districts."

The range of the Prairie Hen may be said to include the "prairies and open cultivated districts of the Mississippi Valley." Also, while its range is being gradually contracted eastward it is being extended westward.

Genus **PEDIECETES** Baird, 1858.

Pediocetes phasianellus campestris (Ridgway). **Sharp-tailed Grouse.**

Tetrao phasianellus (nec Linnæus) AUDUBON, Orn. Biog., IV, 1838, 569, pl. 382.

Pediocates phasianellus BAIRD, B. N. Amer., 1858, 626 (part).

Pediocates phasianellus var. *columbianus* NELSON, Bull. Essex Institute, Vol. VIII, 121.

Pediocates columbianus ELLIOT, Proc. Acad. Nat. Sci. Philadelphia, 1862, 403.

Pediocates phasianellus campestris RIDGWAY, Proc. Biol. Soc. Washington, II, April 10, 1884, 93.

Popular synonyms: SPIKE-TAIL. SPRIG-TAIL. PRAIRIE CHICKEN. PIN-TAIL.

This species is included in the bird fauna of our area on the strength of the note given by Mr. Robert Kennicott in his "Catalogue of Animals Observed in Cook County, Illinois."* He says: "Not uncommon, formerly." Mr. E. W. Nelson says:† "If this species now occurs it is extremely rare. At present it is restricted to the northwestern portion of the state. The last record of its occurrence in this vicinity is furnished by my friend Mr. T. H. Douglas, who informs me that in the fall of 1863 or 1864, while two gentlemen were shooting prairie chickens near Waukegan, they found and secured a covey of these birds, numbering fourteen individuals. These had, in all probability, been raised in the immediate vicinity."

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 121.

†Trans. Illinois State Agri. Society, Vol. I, 1853-1854, 586.

The range of this Grouse includes the plains and prairies east of the Rocky Mountains eastward to Wisconsin and Illinois, and from Manitoba southward to New Mexico.

FAMILY PHASIANIDÆ: PHEASANTS AND WILD TURKEYS.

Genus **MELEAGRIS** Linnaeus, 1758.

Meleagris gallopavo sylvestris (Vieillot). **Wild Turkey.**

Meleagris sylvestris VIEILLOT, Nouv. Dict. d'Hist. Nat., IX, 1817, 447.

Meleagris gallopavo sylvestris ALLEN, Auk, XIX, 1902, 420.

Meleagris gallopavo LINNÆUS, of previous writers on the birds of this region.

Meleagris gallopavo var. *americana* (BART.) COUES, of some authors.

Mr. E. W. Nelson states* that this species was formerly plentiful within our limits. As early as 1853-1854,† Mr. Robert Kennicott made a similar statement. It is now fairly common in the densely wooded districts of the southern portion of Illinois.

Once this species was found in the northeastern United States but now in those regions it is rare. Otherwise its range may be given as the eastern United States.

ORDER COLUMBÆ: PIGEONS.

FAMILY COLUMBIDÆ: PIGEONS.

Genus **ECTOPISTES** Swainson, 1827.

Ectopistes migratorius (Linn.). **Passenger Pigeon.**

Columba migratoria LINNÆUS, S. N., ed. 12, I, 1766, 285.

Ectopistes migratoria SWAINSON, Zool. Journ., III, 1827, 362.

Popular synonyms: **WILD PIGEON.** **WOOD PIGEON.**

This species was many years ago an abundant resident within our limits, but now it is exceedingly rare if it occurs at all. I have a fine male of this species which was shot by Mr. Charles S. Raddin at Rogers Park in July, 1882. December 10, 1890, I received four of these pigeons, in the flesh, from Waukegan, Illinois, at which locality it was claimed they were shot. Three of these specimens were males and one a female. A pair of these is now in the collection of the Chicago Academy of Sciences. In the fall of 1891 I shot a pair at Lake Forest, Illinois. These birds were mounted and are now in the collection of the Chicago Normal School.

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 121.

†Trans. Illinois State Agri. Society, Vol. 1, 1853-1854, 586.

The following notes regarding the presence of the Passenger Pigeon within our limits, or in the immediate vicinity, are of considerable interest. In 1853 Mr. Robert Kennicott listed* this bird as a resident of Cook County with the comment "Very abundant." In 1876, Mr. E. W. Nelson wrote,† "Very abundant migrant; 15th of March to middle of April, and in October and November. Sometimes arrives in February. A few isolated pairs still breed in unfrequented woods." In the Auk, July, 1895, Vol. XII, 298, Mr. Ruthven Deane, of Chicago, published notes which he had collated from authentic sources. These notes have a distinct bearing on the Chicago Area and its vicinity. Mr. Deane writes: "The occurrence of the Wild Pigeon in this section of the country, and in fact throughout the west generally, is becoming rarer every year and such observations and data as come to our notice should be of sufficient interest to record.

"I have, in the past few months, made inquiry of a great many sportsmen who are constantly in the field and in widely distributed localities, regarding any observations on the Wild Pigeon, and but few of them have seen a specimen in the past eight or ten years.

"I have made frequent inquiry among the principal game dealers in Chicago and cannot learn of a single specimen that has been received in our markets in several years. * * *

"A fine male Pigeon was killed by my brother, Mr. Charles E. Deane, April 18, 1877, while shooting snipe on the meadows near English Lake, Indiana. The bird was alone and flew directly over him. I have the specimen now in my collection.

"In September, 1888, while Teal shooting on Yellow River, Stark County, Indiana, I saw a Pigeon fly up the river and alight a short distance off. I secured the bird which proved to be a young female.

"On September 17, 1887, Mr. John F. Hazen and his daughter Grace, of Cincinnati, Ohio, while boating on the Kankakee River, near English Lake, Indiana, observed a small flock of Pigeons feeding in a little oak grove bordering the river. They reported the birds as quite tame and succeeded in shooting eight specimens.

"In the spring of 1893, Mr. C. B. Brown, of Chicago, Illinois, collected a nest of the Wild Pigeon containing two eggs at English Lake, Indiana, and secured both parent birds. * * *

*Trans. Illinois State Agri. Society, Vol. I, 1853-1854, 586.

†Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 1876, 120.

"Mr. John Ferry informs me that three Pigeons were seen near the Desplaines River in Lake County, Illinois, in September, 1893. One of these was shot by Mr. F. C. Farwell.

"In an article which appeared in the Chicago Tribune, November 25, 1894, entitled 'Last of his Race,' Mr. E. B. Clark gives his experience in observing a fine male Wild Pigeon in Lincoln Park, Chicago, Illinois, in April, 1893. I quote from the article: 'He was perched on the limb of a soft maple and was facing the rising sun. I have never seen in any cabinet a more perfect specimen. The tree upon which he was resting was at the southeast corner of the park. There were no trees between him and the lake to break from his breast the fullness of the glory of the rising sun. The Pigeon allowed me to approach within twenty yards of his resting place and I watched him through a powerful glass that permitted as minute an examination as if he were in my hand. I was more than astonished to find here close to the pavements of a great city the representative of a race which always loved the wild woods and which I thought had passed from Illinois forever!'

"Mr. R. W. Stafford of Chicago, Illinois, who has shot hundreds of Pigeons in former years within the present city limits of Chicago, informs me that in the latter part of September, 1894, while shooting at Marengo, Illinois, he saw a flock of six flying swiftly over and apparently alight in a small grove some distance off."

Mr. Deane adds: "The above records will show that while in this section of country large flocks of Passenger Pigeons are a thing of the past, yet they are still occasionally observed in small detachments of single birds."

In the Auk, January, 1895, Vol. XII, 80, Mr. Benjamin T. Gault published the following record: "During late years the Passenger Pigeon has become extremely rare in northeastern Illinois, at least so far as the neighborhood of Chicago is concerned. My latest record was made at Glen Ellyn on Sunday, September 4, 1892. It was a young of the year, very tame and unsuspicious. It was discovered in the company of some jays and feeding about the piles of dirt recently made in excavating for the foundation of a house, well within the limits of the town, and was also observed to be picking the grain from some horse-droppings, in which occupation it was harassed somewhat by the jays."

In the Auk, October, 1895, Vol. XII, 389, Mr. James O. Dunn, of Chicago, published the following records: "While collecting with Mr. Wallace Craig, September 3, 1891, I shot a male Wild Pigeon in an oak grove in Chicago, near 75th Street, between Stony Island Avenue and Lake Michigan. It was feeding and flew up at our approach, alighting perhaps ten feet from the ground, where I shot it. It was not at all wild, and was a bird of the year. We saw two others in the same grove, but did not secure them.

"April 8, 1894, Mr. Edward J. Gekler saw a flock of about fifteen Wild Pigeons flying while in a woods near Liverpool, Indiana.

"Mr. Kaempfer, a taxidermist of this city, had a fine male Passenger Pigeon mounted on one of his shelves which was brought in on March 14, 1894. The gentleman who brought it said he shot it near Liverpool, Indiana, and saw quite a number of them at the time."

In the Auk, January, 1896, Vol. XIII, 81, Mr. Ruthven Deane published the following record: "Mr. John F. Ferry of Lake Forest, Illinois, has kindly notified me of the capture of a young female which was killed in that town on August 7, 1895. The bird was brought to him by a boy who had shot it with a rifle ball, and although in a mutilated condition he preserved it for his collection."

Mr. Henry K. Coae reports the following records for our vicinity: "In June, 1879, I found Wild Pigeons breeding in the woods along the Desplaines River west of Lake Forest: examined two nests, one with two and the other with one egg. On September 13, 1879, I saw a flock of these birds in the same woods and took several specimens. On May 2, 1887, I saw Wild Pigeons at Grand Crossing, Chicago."

Mr. George Klingman took a male Passenger Pigeon at Bryn Mawr on September 30, 1891. This locality is a suburb of the city of Chicago.

In the second edition of the A. O. U. Check-list of North American Birds, published in 1895, the following is given as the range of the Passenger Pigeon: "Eastern North America, from Hudson Bay southward, and west to the Great Plains, straggling thence to Nevada and Washington. Breeding range now mainly restricted to portions of the Canadas and the north-

ern border of the United States, as far west as Manitoba and the Dakotas."

Genus **ZENAIDURA** Bonaparte, 1854.

Zenaidura macroura (Linnæus). **Mourning Dove.**

Columba macroura LINNÆUS, S. N., ed. 10, I, 1758, 164 (par).

Columba carolinensis LINNÆUS, S. N., ed. 12, I, 1766, 286.

Zenaidura carolinensis BONAPARTE, Consp. II, 1854, 84.

Zenaidura macroura RIDGWAY, Proc. U. S. Nat. Mus., VIII, 1885, 355.

Popular synonyms: **TURTLE DOVE. AMERICAN TURTLE DOVE. CAROLINA DOVE. COMMON DOVE.**

A common summer resident. The favorite nesting sites of this species are in the hedges of osage orange (*Maclura aurantiaca*), or on the ground. Of late years, I have found it nesting quite frequently on the ground in the higher fields of our area. It arrives early in March and departs the last of October. Mr. E. W. Nelson says:* "Straggling parties are occasionally observed during the winter. In many places this species becomes semi-domesticated, breeding in the trees in the yard and showing but little fear when approached."

The range of the Mourning Dove covers the whole of temperate North America, from the southern part of the British Possessions southward to the Isthmus of Panama and the West Indies. Its breeding range is coincident with its North American Range.

ORDER RAPTORES: BIRDS OF PREY.

FAMILY CATHARTIDÆ: AMERICAN VULTURES.

Genus **CATHARTES** Illiger, 1811.

Cathartes aura (Linnæus). **Turkey Vulture.**

Vultur aura LINNÆUS, S. N., ed. 10, I, 1758, 86.

Cathartes aura ILLIGER, Prodrömus, 1811, 236.

Rhinogryphus aura RIDGWAY, in Hist. N. Amer. B., III, 1874, 344.

Popular synonyms: **BUZZARD. TURKEY BUZZARD. CARION CROW.**

While the Turkey Vulture is a common summer resident in the southern portion of Illinois, it is but a rare visitant within our area. Some years ago, Mr. Harry Phillips shot one of these birds on his farm at Worth, Illinois, about fourteen miles from Chicago. This individual was sitting on the top of a tree in a pasture, and Mr. Phillips, observing that it was a species unknown to him, shot it and presented the skin to The Chicago

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 121.

Academy of Sciences. Mr. B. T. Gault informs me that on April 1, 1896, he saw three Turkey Vultures flying near the tracks of the Chicago and Northwestern Railroad near Sacramento Avenue, Chicago. The birds were so near that the naked red of their heads was plainly discernible. Even at the time that Mr. E. W. Nelson wrote his "Birds of Northeastern Illinois," in 1876, these Vultures were fully as rare within our limits as they are now. Mr. Nelson states that they were then a common summer resident sixty miles south of Chicago.

The range of the Turkey Vulture is an extensive one, covering the whole of temperate and tropical America from the southern portion of the British Possessions southward to Patagonia and the Falkland Islands.

FAMILY FALCONIDÆ: KITES, HAWKS, EAGLES, ETC.

Genus **ELANOIDES** Vieillot, 1818.

Elanoides forficatus (Linnæus). **Swallow-tailed Kite.**

Falco forficatus LINNÆUS, S. N., ed. 10, 1, 1758, 89.

Falco furcatus LINNÆUS, S. N., ed. 12, I, 1766, 129.

Nauclerus furcatus VIG., Zool. Journ., II, 1825, 387.

Elanoides forficatus COUES, Proc. Acad. Nat. Sci. Philadelphia, 1875, 345.

Popular synonyms: SWALLOW-TAILED HAWK. WHITE-HEADED SWALLOW KITE. FISH-TAIL HAWK. SNAKE HAWK.

While this species may have been quite common many years ago, it is certainly a very rare visitant to our area at the present time. I have but one record of the taking of this species within our vicinity: Mr. J. Grafton Parker, Jr., shot one at Lake Villa, a few miles north of Chicago, on June 5, 1895. Mr. Henry K. Coale reports the taking of three adult specimens at Highland Park in April, 1905. In his "Catalogue of Animals observed in Cook County, Illinois,"* Mr. Robert Kennicott lists the Swallow-tailed Kite with the following comment: "Though once common, this fine bird is now rare. It is still found in the middle of the state." Mr. Kennicott also states that it was known to nest in Cook County. Mr. E. W. Nelson says:† "I can testify to its scarcity at present (1876), only two or three instances of its occurrence in this vicinity within the last twenty years having been ascertained."

The range of this species includes the United States east of the Great Plains and from Canada southward into South Amer-

*Trans. Illinois State Agri. Society, Vol. I, 1853-1854, 581.

†Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol VIII, 1876, 118.

ica. It is much more common in the interior of the United States and is only a casual visitant east of the Alleghanies. Its breeding range is quite coincident with its geographical distributions in the United States.

Genus **CIRCUS** Lacépède, 1801.

Circus hudsonius (Linnaeus). **Marsh Hawk.**

Falco hudsonius LINNEUS, S. N., ed. 12, I, 1766, 128.

Circus hudsonius VIEILLLOT, Ois. Am. Sept., I, 1807, pl. 9.

Circus cyaneus var. *hudsonius* COUES, Key, 1872, 210.

Circus cyaneus of some authors.

Popular synonyms: **HARRIER**. **MARSH HARRIER**. **RIG-TAILED HARRIER**. **AMERICAN HARRIER**.

The Marsh Hawk is a resident species but is much more common during its migrations than in other seasons. About two-thirds of the birds observed within our limits are in the young or reddish phase of plumage. As its name would indicate, it is usually seen on marshes and on prairies. Its migrations usually take place during the latter half of March and first half of April, and in October and November.

The range of this species includes the whole of North America, south in winter to Panama and Cuba. Its breeding range is practically coincident with its geographical distribution, though it nests quite sparingly in the eastern United States south of the parallel of 40°.

Genus **ACCIPITER** Brisson, 1760.

Accipiter velox (Wilson). **Sharp-shinned Hawk.**

Falco fuscus GMELIN, S. N., I, 1788, 280 (*nec* Fabricius, 1780).

Accipiter fuscus BONAPARTE, Comp. List, 1838, 5.

Astur fuscus AUDUBON, Syn. 1839, 18.

Nisus fuscus KAUP, Mon. Falc. Cont. Orn., 1850, 64.

Falco velox WILSON, Amer. Orn., V, 1812, 116, pl. 45, fig. 1.

Accipiter velox VIGORS, Zool. Journ., I, 1824, 338.

Popular synonyms: **LITTLE SWIFT HAWK**. **PIGEON HAWK**. **BULLET HAWK**. **SLATE-COLORED HAWK**.

This species is a variable and at times an abundant migrant. Although these hawks are occasionally seen within our limits throughout the summer, I have no records of their having nested here. They arrive early in March and depart late in October. Mr. B. T. Gault informs me that on two occasions a Sharp-shinned

Hawk has darted viciously at his head as he was walking through woods at Glen Ellyn. This would seem to indicate that the bird was nesting near the locality. Mr. Robert Kennicott records* the nesting of this Hawk within our area. Mr. E. W. Nelson says:† "Abundant during migrations; September 15th to October 30th, and April 15th to May 10th. A few remain to breed."

The range of the Sharp-shinned Hawk includes the whole of North America from Panama northward. It breeds quite throughout the United States and northward.

Accipiter cooperii (Bonaparte). **Cooper's Hawk.**

Falco cooperii BONAPARTE, Ann. Lyc. N. Y., II, 1826, 433.

Astur cooperi BONAPARTE, Comp. List, 1838, 5.

Accipiter cooperi GRAY, List B. Brit. Mus., Accipitres, 1844, 38.

Nisus cooperi SCHLEG., Rev. Acc., 1873, 73.

Popular synonyms: CHICKEN HAWK. BLUE CHICKEN HAWK. SWIFT OR BLUE HAWK OR DARTER. QUAIL OR BLUE QUAIL HAWK.

A quite common summer resident, arriving early in March and departing late in October. This species is very destructive to young poultry, although, like other species of the Raptores, it repays the farmer to some extent by destroying large numbers of mice and other vermin.

Cooper's Hawk breeds throughout its range which extends from the southern portion of the British Possessions south to Central America.

Accipiter atricapillus (Wilson). **American Goshawk.**

Falco atricapillus WILSON, Amer. Orn., VI, 1812, 80, pl. 52, fig. 3.

Astur atricapillus JARD. & SELBY, Illust., 1825, pl. 121.

Astur palumbarius var. *atricapillus* RIDGWAY, Proc. Bost. Soc., XVI, 1874, 57.

Accipiter atricapillus SEEBOHM, Brit. Birds, I, 1883, iv.

Popular synonym: CHICKEN HAWK.

This Hawk may be considered an exceedingly rare winter resident. March 30, 1889, I captured an adult male at Beverly Hills. This is the only recent record I know of regarding the appearance of this species within our limits. Mr. E. W. Nelson says:‡ "Formerly a common winter resident; now very rare. Dr. A. L. Macey of Evanston, found them quite plentiful during the winter of 1870-1871, and obtained specimens. The only time I ever saw the birds alive, was the 3rd of May, 1876, at Waukegan, when a fine adult specimen passed slowly overhead and dis-

*Trans. Illinois State Agri. Society, Vol. I, 1853-1854, 581.

†Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 1876, 118.

appeared toward the north." This species is one of the most beautiful and daring of our hawks.

Breeding chiefly north of the United States, passing southward in winter through the larger portion of the United States.

Genus **BUTEO** Cuvier, 1800.

Buteo borealis (Gmelin). **Red-tailed Hawk.**

Falco borealis GMELIN, S. N., I, ii, 1788, 266.

Buteo borealis VIEILLLOT, Nouv. Dict. d'Hist. Nat., IV, 1816, 478.

Buteo borealis var. *borealis* B. B. & R., Hist. N. Amer. Birds, III, 1874, 282.

Popular synonyms: CHICKEN HAWK. HEN HAWK. RED-TAILED BUZZARD. WHITE-BREASTED CHICKEN OR HEN HAWK. EASTERN RED-TAILED HAWK.

This species is a common resident, and is the most common of the larger hawks. It is, however, much more abundant during its migrations than at other times. In our vicinity it nests as early as the last of February. Mr. B. T. Gault informs me that the striped gopher (*Spermophilus tridecemlineatus*) seems to constitute a favorite article of the diet of this Hawk, and that he found a freshly killed specimen of that rodent on the edge of a nest which he examined May 10, 1895.

The range of this species includes the eastern portion of North America from the fur countries south to Guatemala and westward to the Great Plains.

Buteo borealis kriderii Hoopes. **Krider's Hawk.**

Buteo borealis HOOPES, Proc. Acad. Nat. Sci. Philadelphia, 1873, 238, pl. 5.

Popular synonyms: WHITE RED-TAILED HAWK. WHITE HEN HAWK. CHICKEN HAWK.

This species is included in the fauna of our area on the strength of a specimen presented to the United States National Museum by Mr. H. K. Coale. It was captured in the vicinity of our area July 25, 1876. Regarding this specimen, Mr. Coale says (Auk, Vol. II, January 1885): "Referring to my notes, I find that this was one of the large hawks brought into camp by one of our party while on a collecting trip along the Des Plaines River thirty miles from Chicago northwest. It is an adult female and was captured while perched on a stake in a field not far from the big woods at Half Day, Illinois."

The A. O. U. Check-list gives the following as the range of Krider's Hawk: "Plains of the United States, from Wyoming

and the Dakotas to Minnesota, and south to Texas; casual in Iowa and Illinois."

Buteo borealis calurus (Cass.). Western Red-tailed Hawk.

Buteo calurus CASS., Proc. Acad. Nat. Sci. Philadelphia, VII, 1855, 281.

Buteo borealis var. *calurus* RIDGWAY, Bull. Essex Inst., V, 1873, 186.
Popular synonym: BLACK RED-TAIL.

The Western Red-tail is included in the fauna of our area because of the following record, published by Mr. E. W. Nelson: "In my collection is a fine adult specimen of this variety obtained near Chicago in April, 1873, by my friend Mr. C. H. Smith."

The A. O. U. Check-list gives the following range for the Western Red-tailed Hawk: "Western North America, from the Rocky Mountains to the Pacific, south into Mexico; casual east to Illinois."

Buteo borealis harlani (Audubon). Harlan's Hawk.

Falco harlani AUDUBON, Orn. Biog., I, 1830, 441, pl. 86.

Buteo borealis harlani RIDGWAY, Auk, VII, April, 1890, 205.

Popular synonym: HARLAN'S BUZZARD.

The only record I have of the occurrence of Harlan's Hawk within our limits is that of a specimen which I purchased from a hunter who had just shot it near Calumet Lake. This specimen was captured October 1, 1895. It was a female and was examined by Mr. George K. Cherrie, who pronounced it a juvenile bird in the dark phase of plumage.

The range of this Hawk, as given in the A. O. U. Check-list, includes the "Gulf states and lower Mississippi Valley, north casually to Pennsylvania, Iowa, and Kansas; south to Central America."

Buteo lineatus (Gmelin). Red-shouldered Hawk.

Falco lineatus GMELIN, S. N., I, ii, 1788, 268.

Buteo lineatus VIEILLOT, Nouv. Dict. d'Hist. Nat., IV, 1816, 478.

Falco butcoides NUTTALL, Man., I, 1832, 100.

Popular synonyms: HEN HAWK. CHICKEN HAWK. WINTER BUZZARD.

This species is one of our resident hawks, and is quite common during its migrations. It arrives about March 20th and nests in April. It frequents the heavily timbered woods, principally in the northern portion of both Cook and Dupage counties. It is the most common of the larger hawks, especially in

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VII, 1876, 119.

our timbered regions. Mr. Robert Kennicott includes this species in his list of Cook County birds,* with the following interesting note: "In October, 1854, a flight of apparently several thousand of this Hawk passed over Chicago from the Lakes, moving towards the southwest." Mr. E. W. Nelson says:† "The main fall migration of hawks in this vicinity takes place the last of September or the first of October and a statement of the numbers which pass in a single day, to one who has not observed them, would be received with incredulity. Choosing a day when there is a strong south or southwest wind, the hawks commence moving south early in the morning and continue flying the entire day, and so numerous that, taking a stand at a good point, one would have from one to fifty hawks in view, with but very few intermissions, throughout the day. Among these occur all the migrants, but by far the greater number consist of the smaller species." At the present time the Red-shouldered Hawk is not as abundant as it was in the days of Mr. Kennicott, nor are the large flocks of hawks, of which Mr. Nelson speaks, to be seen during their migrations, excepting on rare occasions.

The range of this species includes eastern North America from the southern portions of the British Possessions southward to the Gulf States and eastern Mexico; westward to the Great Plains.

***Buteo swainsoni* Bonaparte. Swainson's Hawk.**

Buteo swainsoni BONAPARTE, Geog. & Comp. List, 1838, 3.

Popular synonyms: BROWN HAWK. BLACK HAWK. CHICKEN HAWK.

Swainson's Hawk is included in the fauna of our region because of a record published by Mr. E. W. Nelson,† who says. "Of rather rare occurrence in this vicinity. Have only noted it during the migrations. I obtained an immature specimen May 30, 1875, at Riverdale, Illinois, and have seen others since. As this species breeds in southern Illinois it probably also breeds in the northern portions of the state."

The range of this species includes western North America from Wisconsin, Illinois, Arkansas and Texas to the Pacific coast, and from the Arctic regions on the north, south through Central America and South America to the Argentine Republic.

***Buteo platypterus* (Vieillot). Broad-winged Hawk.**

Falco latissimus WILSON, Amer. Orn., VI, 1812, 92, pl. 54, fig. 1.

Buteo latissimus SHARPE, Cat. B. Brit. Mus., 1, 1874, 193.

*Trans. Ill. State Agri. Soc., 581, 1855

†Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 119.

Sparvius platypterus VIEILLOT, Encycl. Method., Orn., III, 1823, 127.

Buteo platypterus FANON, Auk, XVIII, April, 1901, 218.

This Hawk is a not uncommon summer resident, and during some seasons it is quite common during its migrations. Mr. B. T. Gault reports taking a set of fresh eggs of this species on April 15, 1889, at Jefferson, in Cook County. These birds arrive early in March and depart late in October.

The range of the Broad-winged Hawk extends through eastern North America, from Hudson Bay southward to the latitude of the upper Amazon River in South America. It breeds throughout its range within the United States.

Genus **ARCHIBUTEO** Brehm, 1828.

Archibuteo lagopus sancti-johannis (Gmelin). **American Rough-legged Hawk.**

Falco sancti-johannis GMELIN, S. N., I, ii, 1788, 273.

Buteo sancti-johannis NUTTALL, Man., I, 1832, 98.

Archibuteo lagopus var. *sancti-johannis* COUES, Key, 1872, 218.

Popular synonym: **BLACK HAWK.**

A not uncommon winter resident. Mr. B. T. Gault has at times found them plentiful during October and November. In Du Page County he has also observed them late in February. Mr. E. W. Nelson says* that this hawk "arrives in large numbers the first of October, and after remaining for a few weeks the majority pass further south for the winter. The last of February and the first of March they depart for the north." Mr. J. G. Parker has observed them between January first and April seventh.

The range of this species includes the whole of North America north of Mexico, breeding in Arctic and subarctic regions, excepting in Alaska.

Genus **AQUILA** Brisson, 1760.

Aquila chrysaetos (Sprungli). **Golden Eagle.**

Falco chrysaetos LINNÆUS, S. N., ed. 10, I, 1758, 88.

Aquila chrysaetos SPRUNGLI, in Andrae's Briefe aus der Schweiz, 1776, 196.

Aquila chrysaetos DUMONT, Dict. Sci. Nat., I, 1816, 339.

Aquila fulva NUTTALL, Man., I, 1832, 62.

Aquila chrysaetos var. *canadensis* RIDGWAY, 1873.

Popular synonyms: **BLACK EAGLE. RING-TAILED EAGLE.**

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 119.

The Golden Eagle is a very rare winter visitant within our limits. At Liverpool, Indiana, I saw a bird which I thought was *Aquila chrysaëtos* though it may have been a bald eagle in immature plumage. Mr. Robert Kennicott records it as rare in his list of Cook County birds.* Mr. E. W. Nelson gives an interesting note regarding the Golden Eagle:† “Not very uncommon during winter. Arrives in November and departs early in spring. Formerly nested throughout the state. In December, 1874, while hunting Prairie Chickens in a field a few miles south of Chicago, my friend, Mr. T. Morris, was suddenly attacked with great fury by a pair of these birds, they darting so close that had he been prepared he could easily have touched the first one with his gun. As it arose to renew the attack he fired a small charge of number six shot, and brought it down, dead. The second then darted at him, and so rapidly that he did not fire until it had turned and was soaring up, but so near that the charge passed through the primaries in a body, disabling but not injuring the bird, which was then captured alive. The cause of the attack was explained by the proximity of a carcass upon which these birds had been feeding. The craw of the dead eagle contained a large quantity of carrion, as I learned upon skinning it.”

The Golden Eagle frequents the whole of North America, north of Mexico. It breeds chiefly in the unfrequented mountainous regions of its range. It also frequents the northern portions of the Old World.

Genus **HALIÆTUS** Savigny, 1809.

Haliæetus leucocephalus (Linnæus). **Bald Eagle.**

Falco leucocephalus LINNÆUS, S. N., ed. 12, I. 1766, 124.

Haliæetus leucocephalus BOIE, Isis, 1822, 548.

Falco washingtonianus NUTTALL, Man., I, 1832, 67.

Popular synonyms: OLD ABE. WHITE-HEADED EAGLE. GRAY EAGLE. AMERICAN SEA EAGLE. BIRD OF WASHINGTON.

The Bald Eagle may be considered a rare resident. It is, however, rather frequent along the eastern shore of Lake Michigan during the fall and winter. In the spring of 1897 a pair nested near Millers, Indiana and Mr. Edward Carr obtained the young birds. On August 8, 1897, I saw five individuals of this species at Millers and obtained one of them. While Mr. J.

*Trans. Illinois State Agri. Society, Vol. I, 1853-1854, 580.

†Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 1876, 119.

Grafton Parker and myself have been hunting together at Liverpool, Indiana, we have, on a number of occasions, seen Bald Eagles, both in the spring and in the fall. On the Kankakee marshes near Kouts, Indiana, there were two nests of this species, both of which were occupied during the spring of 1896. One of the nests was in a dead oak tree and not over fifty feet above the ground and within twenty feet of a haystack. The female would allow us to approach within seventy-five yards of the nest before she would leave it.

The range of this species includes the whole of North America, north of Mexico; northwest through the Aleutian Islands to Bering Island, Kamchatka. It breeds locally throughout its range.

Genus **FALCO** Linnæus, 1758.

Falco peregrinus anatum (Bonaparte). **Duck Hawk.**

Falco peregrinus WILSON, Amer. Orn., IX, 1814, 120, pl. 76.

Falco anatum BONAPARTE, Geog. & Comp. List, 1838, 4.

Falco peregrinus B. *anatum* BLASIUS, List. B. Eur., 1862, 3.

Falco communis var. *anatum* RIDGWAY, in B. B. & R., Hist. N. Amer. B., III, 1874, 128, 132.

Popular synonyms: AMERICAN PEREGRINE. BULLET HAWK. GREAT-FOOTED FALCON.

The Duck Hawk is a very rare visitant within our limits. Mr. George Clingman has a male specimen which was shot at Bryn Mawr on September 29, 1899. There are two specimens of this noble Hawk in the museum of the Northwestern University in Evanston, which were captured in the spring of 1881 by Mr. W. H. Ballou near the University. In the collection of Mr. Ruthven Deane there is a large adult specimen of this species which was taken in October, 1895, on Calumet Lake, while it was attempting to seize a duck which had just been shot by a local hunter and was lying among the decoys. Mr. E. W. Nelson says the Duck Hawk was "not uncommon during the migrations," at the time he wrote in 1876. He also says that it was "formerly a rare summer resident."

The range of the Duck Hawk includes the whole of North America and the larger portion of South America. It breeds locally throughout most of its United States range.

Falco columbarius Linnæus. **Pigeon Hawk.**

Falco columbarius LINNÆUS, S. N., ed. 10, l. 1758, 90.

Falco (Esalon) lithofalco var. *columbarius* B. B. & R. Hist. N. Amer. B., III, 1874, 143, 144.

Popular synonyms: AMERICAN MERLIN. BULLET HAWK.

This little Hawk is a rare resident but not uncommon during its migrations. Mr. E. W. Nelson records* it as an "abundant migrant, from March 20th to May 1st, and from September 15th to October 5th." He also considered it a rare summer resident. I have found this species very bold and unsuspicious, and have an adult bird in my collection, which I captured at South Chicago, March 18, 1890, while it was attempting to catch an English sparrow among the cars in the freight yard of the Illinois Central Railroad.

Its range includes the northern portion of South America, the West Indies, and the whole of North America. It breeds chiefly north of the United States.

Falco sparverius Linnaeus. **American Sparrow Hawk.**

Falco sparverius LINNAEUS, S. N., ed. 10, I, 1758, 90.

Popular synonyms: AMERICAN KESTREL. MOUSE HAWK. LITTLE BLUE HAWK.

A common summer resident in a portion of our area, arriving early in the spring and departing when severely cold weather sets in. Mr. B. T. Gault informs me that the Sparrow Hawks are not common in DuPage County, and that they are not known to breed there. Mr. E. W. Nelson says* that this species is an "abundant migrant and rather common summer resident."

The range of this species includes North America east of the Rocky Mountains, from the Great Slave Lake south to the northern portion of South America.

Genus **PANDION** Savigny, 1809.

Pandion haliaëtus carolinensis (Gmelin). **American Osprey.**

Falco carolinensis GMELIN, S. N., I, i, 1788, 263.

Pandion carolinensis AUDUBON, B. Amer., 1831, pl. 81.

Pandion haliaëtus carolinensis RIDGWAY, Proc. Acad. Nat. Sci. Philadelphia, 1870, 143.

Popular synonyms: FISH EAGLE. FISH HAWK.

A rare migrant, seen principally along the shore of Lake Michigan, or on our larger inland lakes. I have observed them on both Berry and Calumet lakes. An adult specimen now in the collection of The Chicago Academy of Sciences, was taken on the Fox River, near Lake County, Illinois, September 28,

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 118.

1896. Mr. B. T. Gault reports seeing a specimen of this species in DuPage County on May 15, 1894. Mr. E. W. Nelson gives the following record:* "Not uncommon during March and April in spring, and during September and October in fall. Some seasons this species is quite numerous, especially along the Lake shore."

The range of the Osprey includes the whole of North America, from Alaska and Hudson Bay south to northern South America and the West Indies.

FAMILY STRIGIDÆ: BARN OWLS.

Genus **STRIX** Linnæus, 1758.

Strix pratincola Bonaparte. American Barn Owl

Strix flammea "LINNÆUS." WILSON, Amer. Orn., VI, 1812, 57, pl. 50, fig. 2.

Strix pratincola BONAPARTE, Geog. & Comp. List, 1838, 7.

Strix flammea var. *americana* COUES, Key, 1872, 201.

Strix flammea var. *pratincola* B. B. & R., Hist. N. Amer. B., III, 1874, 13.

Popular synonym: **MONKEY OWL.**

A very rare visitant. An adult male of this species is in the collection of the Field Columbian Museum, which was shot just outside the main entrance of the museum building in Jackson Park, Chicago, on August 15, 1896. Mr. C. A. Tallman shot a female near the "sag" at Worth, Illinois, on August 31, 1895. Mr. J. Grafton Parker, Jr., reports the taking of a specimen at Calumet Heights, Illinois, on November 30, 1899, by Mr. Gold. It is quite possible that the Barn Owls may breed within our limits, though very rarely. Mr. Fred Hilgard while collecting at Kouts, Indiana, May 30, 1896, in company with Mr. Parker and myself, shot an adult female. From the condition of its abdomen, it was evident that the bird had nested in or very near that locality. Mr. E. W. Nelson gives the following record:† "Very rare visitant. A pair were caught in a trap near Chicago some years since by Mr. C. H. Smith."

Its range covers the United States, though much less common in the northern portion and only occasionally seen in Canada, and Mexico. It is wanting in unwooded districts. It breeds northward to about latitude 41°.

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 118.

†Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 116.

FAMILY BUBONIDÆ. HORNED OWLS, SCREECH OWLS, ETC.

Genus **ASIO** Brisson, 1760.**Asio wilsonianus** (Less.). **American Long-eared Owl.**

Strix otus WILSON, Amer. Orn., VII, 1812, 73, pl. 51, fig. 3 (*nec* Linnaeus).

Otus wilsonianus LESS., Traité Orn., I, 1831, 110.

Otus vulgaris var. *wilsonianus* ALLEN, Bull. M. C. Z., III, 1872, 180.

Otus vulgaris of some authors.

Asio wilsonianus COUES, Check List, ed. 2, 1882, 81, No. 472.

Popular synonym: LESSER HORNED OWL.

Quite abundant in past years, the Long-eared Owl is now a rather uncommon resident. It is principally found in the timber which skirts some of the swamp lands of our area. Mr. B. T. Gault informs me that this species occurs regularly in DuPage County during the early spring and late fall. Removing the timber from our vicinity for the purpose of settlement will probably eventually drive this Owl entirely from our limits. Its strictly nocturnal habits and its attachment for certain localities have made it less well known than are some of the other species. "Its favorite haunts are dense willow thickets, where it may be surprised taking its daytime nap, standing bolt upright, with feathers closely pressed to its body, and long ear-tufts erect, thus presenting a very comical figure." Mr. Robert Kennicott includes this species in his list of Cook County birds* with the notation "common," and also states that it is "known to nest in Cook County."

The range of this species covers North America in general, from the limit of forests on the north, south to the Mexican tablelands. Its breeding range is coincident with its geographical distribution.

Asio accipitrinus (Pall.). **Short-eared Owl.**

Strix accipitrina PALL., Reise Russ. Reichs., I, 1771, 455.

Strix brachyotus FORST., Phil. Trans., LXII, 1772, 284.

Otus brachyotus BOIE, Isis, 1822, 549.

Brachyotus palustris BONAPARTE, 1838.

Asio accipitrinus NEWT., Yarrell's Brit. B., Ed. 4, I, 1872, 163.

Popular synonyms: MARSH OWL. PRAIRIE OWL. SWAMP OWL.

The Short-eared Owl is a summer resident within our limits. It probably nests with us also, for I have found them nesting a few miles south of Chicago, at Lowell, Indiana, and have observed them throughout the summer in Cook County. Mr. Robert Kennicott records it as having nested in Cook County,* and says:

*Trans. Illinois State Agri. Society, Vol. I, 1853-1854, 581.

"Abundant on the prairies. It flies much by day. It has been said to nest in bushes; but I have always found it nesting on the ground." Mr. E. W. Nelson says: "The most abundant species of the family. Arrives from the north in large numbers the first of November and disperses through the state. They are common everywhere, on prairies and marshes, during the winter. Remain concealed in a bunch of grass or reeds until about two o'clock, P. M., when they commence flying low over the ground in search of their prey."

Its range covers the whole of North America, and it is nearly cosmopolitan. It breeds from about latitude 39° northward.

Genus **SYRNIUM** Savigny, 1809.

Syrnium varium (Barton). **Barred Owl.**

Strix nebulosa FORSTER,* of authors, not of Forster.

Strix varius BARTON. Fragm. N. H. Penn., 1799, 11.

Syrnium varium PREBLE, N. Amer. Fauna, No. 22, 1902, 109.

Popular synonym: HOOT OWL.

The Barred Owl has become an uncommon resident. From the year 1887 to the year 1892 this species was fairly common on the timbered ridge at Beverly Hills, and also in the woods west of Evanston and Lake Forest. In the latter woods Mr. Ned Pratt obtained several sets of eggs. Since the building of the small suburban towns in the vicinity of Chicago, the Barred Owls have gone to the heavier wooded portions of the state, very few having been seen within our limits since the year 1892. Mr. E. W. Nelson found this Owl rare in this vicinity, "owing to the lack of heavy timber." He only knew of two instances of its capture.

Its range covers North America, east of the Great Plains from Hudson Bay southward to Georgia and Texas. It breeds throughout its range.

Genus **SCOTIAPTEX** Swainson, 1837.

Scotiapterx nebulosa (Forster). **Great Gray Owl.**

Strix nebulosa FORSTER, Philos. Trans., LXII, 1772, 424.

Strix cinerea GMELIN, S. N. I. i, 1788, 291.

Scotiapterx cinerea SWAINSON, Classification B., II, 1837, 217.

Syrnium cinereum BONAPARTE, List, 1828, 6.

Scotiapterx nebulosum PREBLE, N. Amer. Fauna, No. 22, 1902, 109.

Popular synonyms: GREAT CINEREOUS OWL. SPECTRAL OWL.

****Strix nebulosa* Forster plainly having been based on the great gray owl, the name *Strix varius* Barton seems to be the next name available for the Barred Owl." Preble, N. Amer. Fauna, No. 22, 1902, 109.

I have been unable to find more than two records of this Owl having been taken or observed within our limits. Mr. Robert Kennicott includes it in his list* of Cook County birds, with the comment "rare." Mr. E. W. Nelson says: "A very rare winter visitant."

Its range covers Arctic America, southward in winter to the northern United States. Breeds entirely north of the United States.

Genus **CRYPTOGLAUX**|| Richmond, 191.

Cryptoglaux tengmalmi richardsoni (Bonaparte). **Richardson's Owl.**

Strix tengmalmi Sw. & Rich., Fauna Bor. Amer., II, 1831, 94, pl. 82 (nec Gmelin).

Nyctale richardsoni BONAPARTE, Geog. & Comp. List, 1838, 7.

Nyctale tengmalmi var. *richardsoni* RIDGWAY, Amer. Nat., VI, May 1872, 285.

Popular synonym: SPABROW OWL.

The only records I have of the occurrence of this rare Arctic Owl within our limits are the following notes of Mr. Ruthven Deane, published in the Auk. The first note also includes the first recorded capture of Richardson's Owl in the state of Illinois. Mr. Deane says:† "The only previous capture of this Owl in the State was recorded in the 'Ornithologist and Oologist' (Vol. X, March, 1885), one having been taken October 15, 1884, at Rockford. I am indebted to Mr. Robert H. Van Schaack for the following information: 'The Richardson's Owl was shot by my son, Louis F. Van Schaack, December 26, 1902, in Kenilworth, Illinois. He found the bird along a small ditch that drains from the Skokie Swamp; he shot the Owl with a toy air gun! I examined the specimen while in the possession of the taxidermist who mounted it, who informed me that he had mounted another specimen of this species about the same time, which was said to have been shot not far from Chicago, but I have been unable to get any definite locality or date.' In October of the same year, Mr. Deane published the following note:‡ "In recording the second capture of this Owl for the State, I mentioned that another specimen had been reported, but that I was unable to get any definite information as to locality and date. Through the kindness of Mr. Frederick C. Pierce of Chicago I am now enabled to record a third specimen which was

*Trans. Illinois State Agri. Society, Vol. I, 1853-1854, 581.

||Auk, Vol. XVIII, April, 1901, 193, *Nyctala* Brehm 1828 preoccupied by *Nyctalus* Bowdich, 1825, for a genus of Mammals.

†Auk, Vol. XX, July 1903, 305.

‡Auk, Vol. XX, October 1903, 433.

taken in Cicero, in December, 1902, and is now in his possession."

The following range of this Owl is given in the A. O. U. Check-list: "Arctic America, south in winter into the northern United States. Breeds from the Gulf of St. Lawrence and Manitoba northward."

Cryptoglaux acadica (Gmelin). **Saw-whet Owl.**

Strix acadica GMELIN, S. N., I, 1788, 296.

Nyctale acadica BONAPARTE, Geog. & Comp. List, 1838, 7.

Popular synonyms: WHITE-FRONTED OWL. ACADIAN OWL.

Although this species has not been found nesting within our limits, adult specimens have been taken throughout the year. Mr. B. T. Gault and myself have observed this species during May and June in the pine region of Lake County, Indiana. Mr. Gault saw one individual perched upon the iron rafters of the Illinois Central Railway station at the foot of Lake Street, Chicago, in September. A specimen in my collection was taken at Colhour, Indiana, on March 13, 1890. Nearly all the records I have, however, are of specimens captured during the winter months. Mr. E. W. Nelson gives a very interesting note.* He says: "Not an uncommon species. Is of frequent occurrence in Chicago, where, upon some of the most frequented streets in the resident portion of the town, over a dozen specimens have been taken within two years. Whether resident or not I have been unable to determine."

The range of the Saw-whet Owl practically includes the whole of North America. It breeds from the middle States northward; also throughout the western mountain regions as far south as the northern portion of Mexico.

Genus **MEGASCOPS** Kaup, 1848.

Megascops asio (Linnaeus). **Screech Owl.**

Strix asio LINNÆUS, S. N., ed. 10, I, 1758, 92.

Scops asio BONAPARTE, Comp. List, 1838, 6.

Megascops asio STEJNEGER, Auk, II, April, 1885, 184.

Popular synonyms: MOTTLED OWL. LITTLE MOTTLED OWL. LITTLE RED-OWL. LITTLE GRAY OWL.

In past years the Screech Owl was an abundant but now it is a rather uncommon resident. A few still nest in the timber along Wolf and Hyde lakes, Indiana. Mr. Robert Kennicott includes it in his list of Cook County birds† with the comment "Abundant." Mr. E. W. Nelson says: "Rather common.

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 117.

†Trans. Ill. State Agri. Soc., Vol. I, 1853-1854, 581.

Resident. Often strays into Chicago and becomes confused, when they may be captured alive."

The range of this species covers temperate North America east of the Great Plains.

Genus **BUBO** Duméril, 1806.

Bubo virginianus (Gmelin). **Great Horned Owl.**

Strix virginiana GMELIN, S. N., I, pt. i, 1788, 287.

Bubo virginianus BONAPARTE, Geog. & Comp. List, 1838, 6.

Popular synonyms: HOOT OWL. CAT OWL. BOOBY OWL.

The Great Horned Owl was a common resident many years ago, but it is now very rare. Even as early as 1876, Mr. Nelson records it as formerly common but at that time a not common resident. In 1890, Mr. Ned Pratt collected several sets of the eggs of this Owl near Lake Forest, a short distance north of Chicago.

The range of this species extends from Labrador south through eastern Mexico to Costa Rica and east of the Great Plains.

Bubo virginianus arcticus (Swains.). **Arctic Horned Owl.**

Strix (Bubo) arctica SWAINS., in Sw. & Rich., Fauna Bor. Amer., II, 1831, 86, pl. 30.

Bubo virginianus var. *arcticus* CASS., Illust. B. Cat., etc., 1854, 178.

This variety of the Great Horned Owl is included in this list on the strength of the following published record of Mr. E. W. Nelson:* "A rare winter visitant. Have a fine specimen in my collection, taken the last of December, 1874."

This variety of *virginianus* winters as far south as Idaho, Wyoming and South Dakota.

Genus **NYCTEA** Stephens, 1826.

Nyctea nyctea (Linnaeus). **Snowy Owl.**

Strix nyctea LINNAEUS, S. N., ed. 10, I, 1758, 93.

Surnia nyctea SELBY, Ill. Br. Orn., I, 1833, 95, pl. 23.

Nyctea nyctea LICHT., Nomen. Mus. Berol., 1854, 7.

Nyctea scandiaca NEWT., 4th ed. Yarrell's Hist. Brit. B., iii, 1872, 187.

Nyctea scandiaca var. *arctica* RIDGWAY, B. B. & R., Hist. N. Amer. B., III, 1874, 61, 70.

Popular synonyms: GREAT WHITE OWL. SNOW OWL. ERMINE OWL. WHITE OWL.

An irregular winter visitant. Mr. J. Grafton Parker, Jr., informs me that on November 3, 1885, he observed two Snowy

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 117.

Owls perched on the chimney tops of a residence on Grand Boulevard, near Thirty-fifth Street in Chicago. I saw three of these birds in a small grove near Park Manor, on March 16, 1890. Two days later a large female, probably one of the birds which I had observed, was brought to me having been shot while it was perched on the roof of a house in Park Manor. Records of years ago show that the Snowy Owl was then much more common within our limits. Mr. Robert Kennicott, in his list of Cook County birds,* says: "Common in winter. Last winter, during the very cold and stormy weather, I frequently saw them capture prairie hens." Mr. E. W. Nelson says:† "Regular winter resident. More numerous in the vicinity of the Lake. Arrives in November and a few remain as late as the first of May."

The range of the Snowy Owl includes the northern portion of the northern hemisphere. In North America it breeds only north of the United States, and in winter migrates southward to the middle United States, or even further south in very cold and stormy seasons.

Genus **SURNIA** Duméril, 1806.

Surnia ulula caparoch (Müller). **American Hawk Owl.**

Strix caparoch MÜLLER, S. N., suppl., 1776, 69.

Strix hudsonia GMELIN, S. N., I, pt. i, 1788, 295.

Surnia funerea BONAPARTE, List, 1838, 6.

Surnia ulula var. *hudsonia* COUES, Key, 1872, 305.

Surnia ulula caparoch STEJNEGER, Auk, I, October, 1884, 363.

Popular synonyms: HUDSONIAN HAWK OWL OR DAY OWL.

This Owl is included in our list on the strength of the following records. Mr. Robert Kennicott includes it in his list of Cook County birds* without comment. Mr. E. W. Nelson says:† "Rare winter resident. Dr. J. W. Velie tells me that he obtained a specimen in Kane County, Illinois, the first of September, 1869."

The American Hawk Owl is a bird of the Arctic regions of America, breeding from Newfoundland northward. In winter, it migrates to the northern border of the United States. Its occurrence elsewhere would be as a casual visitant.

*Trans. Illinois State Agri. Society, Vol. I, 1853-1854, 581.

†Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 1876, 117.

ORDER PSITTACI: PARROTS AND PAROQUETS.

FAMILY PSITTACIDÆ: PARROTS AND PAROQUETS.

Genus **CONURUS** Kuhl, 1820.

Conurus carolinensis (Linnæus). **Carolina Paroquet.**

Psittacus carolinensis LINNÆUS, S. N. ed. 10, I, 1758, 97.

Conurus carolinensis LESS., *Traité*, 1831, 211.

Popular synonyms: ILLINOIS PAROQUET. CAROLINA PARAKEET.

Mr. Robert Ridgway says:* "The avian-fauna of Illinois has lost no finer or more interesting member than the present species, which is probably now everywhere extinct within our borders, though fifty years ago it was of more or less common occurrence throughout the state." The only record that I have of the occurrence of this Paroquet within our limits, is that of Mr. E. W. Nelson, who says:† "Formerly occurred. Specimens were taken in this vicinity by R. Kennicott many years ago, and Dr. H. M. Bannister informs me that he has seen it in this vicinity."

While this species formerly had quite an extended range, it is now found only in limited portions of Florida and the states bordering the Gulf of Mexico, and portions of the lower Mississippi Valley as far north as Arkansas and the Indian Territory.

ORDER COCCYGES: CUCKOOS, AND KINGFISHERS.

FAMILY CUCULIDÆ: CUCKOOS, ETC.

Genus **COCCYZUS** Vieillot, 1816.

Coccyzus americanus (Linnæus). **Yellow-billed Cuckoo.**

Cuculus americanus LINNÆUS, S. N., ed. 10, I, 1758, 111.

Coccyzus americanus BONAPARTE, *Journ. Acad. Nat. Sci. Philadelphia*, III, ii, 1824, 367.

Popular synonyms: RAIN CROW. WOOD PIGEON. COW-COW.

This species is a common summer resident, arriving early in May and departing in October.

The range of this Cuckoo includes North America east of the Great Plains, and it breeds from Florida north to New Brunswick. It winters south through Mexico and Central America as far as Costa Rica.

Coccyzus erythrophthalmus (Wilson). **Black-billed Cuckoo.**

Cuculus erythrophthalmus WILSON, *Amer. Orn.*, IV, 1811, 16 pl. 28.

*The Ornithology of Illinois, Vol. I, 1889, 397.

†Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 1876, 116

Coccyzus erythrophthalmus BONAPARTE, Journ. Acad. Nat. Sci. Philadelphia, III, ii, 1824, 367.

Popular synonym: RAIN CROW.

This Cuckoo is a summer resident, but it is not as plentiful as the yellow-billed species and is often confounded with it. It also arrives and departs at about the same time as the latter species.

Its range includes eastern North America, west to the Rocky mountains and it breeds northward as far as Labrador and Manitoba. In winter it migrates southward as far as the valley of the Amazon River.

FAMILY ALCEDINIDÆ: KINGFISHERS.

Genus **CERYLE** Boie, 1828.

Ceryle alcyon (Linneæus). **Belted Kingfisher.**

Alcedo alcyon LINNÆUS, S. N., ed. 10, I, 1758, 115.

Ceryle alcyon BOIE, Isis, 1828, 316.

The Belted Kingfisher, commonly called Kingfisher, is a common summer resident, arriving early in April and departing in October.

Its range includes the whole of North America from the Arctic Ocean south to Panama and the West Indies. It breeds throughout the United States and northward.

ORDER PICI: WOODPECKERS.

FAMILY PICIDÆ: WOODPECKERS.

Genus **DRYOBATES** Boie, 1826.

Dryobates villosus (Linnæus). **Hairy Woodpecker.**

Picus villosus LINNÆUS, S. N., ed. 12, I, 1766, 175.

Dryobates villosus CABANIS, Mus. Hein., IV, ii, June 15, 1863, 66.

Popular synonym: BIG SAPSUCKER.

This species is a common resident in the northern portion of our area, but is rather rare in the southern portion. It nests abundantly in the vicinity of Glen Ellyn, Illinois.

The range of this species includes the northern and middle portions of the United States and the more southern portions of the British Possessions from the Atlantic coast to the Great Plains.

Dryobates pubescens medianus (Swainson). **Downy Woodpecker.**

Picus pubescens LINNÆUS, S. N., ed. 12, I, 1766, 175 (in part).

Picus (Dendrocopus) medianus SWAINSON, in Sw. & Rich., Fauna Bor. Amer., II, 1831, 308.

Picus medianus NUTTALL, Man., II, 1834, 601.

Dryobates pubescens CABANIS, Mus. Hein., IV, ii, June 15, 1863, 62 (in part).

Dryobates pubescens medianus BREWSTER, Auk, Jan., 1897, 82.

Popular synonym: LITTLE SAPSUCKER.

A rare resident, although common during its migrations. Mr. Robert Kennicott reported it to be "common" within our limits as well as throughout the state, and states that it nests in Cook County. Mr. E. W. Nelson says: "Resident. Much more numerous at all seasons than the hairy woodpecker."

The range of the Downy Woodpecker includes eastern and northern North America, west to British Columbia and to the Great Plains and south to the Gulf of Mexico. Dr. Ridgway states that its range also includes nearly the whole of Alaska.

Genus **PICOIDES** Lacépède, 1801.

Picoides arcticus (Swainson). **Arctic Three-toed Woodpecker.**

Picus (Apternus) arcticus SWAINSON, in Sw. & Rich., Fauna Bor. Amer., II, 1831, 313.

Picoides arcticus GRAY, Gen. B., I, 1845, 434.

Popular synonym: BLACK-BACKED THREE-TOED WOODPECKER.

This Woodpecker is included in our list on the strength of the following records. Mr. E. W. Nelson says:* "Rare winter resident. A specimen was shot from a telegraph pole, in Chicago, a few year since, by Dr. J. W. Velie. It is a common species in Northern Wisconsin, and before the pines along the Lake were destroyed was probably a regular winter visitant to this state." Mr. Eliot Blackwelder reports the occurrence of an individual of this species at Morgan Park, Illinois, December 29, 1894.

The range of this species covers northern North America, from the Arctic regions south to the northern United States.

Genus **SPHYRAPICUS** Baird, 1858.

Sphyrapicus varius (Linnæus). **Yellow-bellied Sapsucker.**

Picus varius LINNÆUS, S. N., ed. 12, I, 1766, 176.

Sphyrapicus varius BAIRD, Birds N. Amer., 1858, 103.

Popular synonym: RED-THEATED SAPSUCKER.

This is the most common of our migratory woodpeckers. They seem to enjoy the scantily wooded portions of our city

*Birds of Northeastern Illinois. Bull., Vol. VIII, 1876, 115.

parks, the noise of the cable lines and traffic teams apparently not disturbing them in the least. They arrive early in April from the south and remain with us until the middle of May. During their fall migration they appear in September and depart in October. Mr. E. W. Nelson says that "the males in spring often have the white nuchal band tipped with red much as in var. *nuchalis*. In the collection of Mr. C. N. Holden is a fine specimen obtained at Chicago, which has the red extending over the head and neck much like the distribution of color in *Sphyrapicus ruber*, but of a much lighter shade."

The breeding range of this species is from the northern United States northward and in winter they migrate southward to the West Indies and through Mexico to Costa Rica.

Genus **CEOPHLEUS** Cabanis, 1862.

Ceophleus pileatus abieticola Bangs. **Northern Pileated Woodpecker.**

Picus pileatus LINNÆUS, S. N., ed. 10, I, 1758, 113 (in part).

Hylatomus pileatus BAIRD, B. N. Amer., 1858, 107 (in part).

Ceophleus pileatus CABANIS, Jour. fur Orn., 1862, 176 (in part).

Ceophleus pileatus abieticola BANGS, Auk, XV, April, 1898, 176.

Popular synonyms: WOODCOCK. LOGCOCK. BLACK WOODCOCK OR LOGCOCK.

The only records I have of the occurrence of this species within our limits are the following. Mr. Robert Kennicott places it in his list of Cook County birds with the following notation: "Rare. Not uncommon formerly. Numerous in southern Illinois." Mr. E. W. Nelson says: "A rare winter visitant. Two specimens were taken near Chicago during the winter of 1873." Mr. George Clingman reports the taking of a specimen at Half Day, Illinois, on December 30, 1893. Mr. J. Grafton Parker and myself observed this species at Kouts, Indiana, during the months of June and December, 1896.

The range of this Woodpecker includes the heavily wooded districts from the southern Alleghanies northward.

Genus **MELANERPES** Swainson, 1831.

Melanerpes erythrocephalus (Linnæus). **Red-headed Woodpecker.**

Picus erythrocephalus LINNÆUS, S. N., ed. 10, I, 1758, 113.

Melanerpes erythrocephalus SWAINSON, in Sw. & Rich., Fauna Bor. Amer., II, 1831, 316.

A common summer resident, a few remaining within our limits during the winter. The majority of these Woodpeckers arrive the last of April, and remain with us until about the first of October, when they move southward.

The range of this species includes the eastern United States and British Possessions, east of the Rocky Mountains. Stragglers are occasionally seen as far west as Utah and Arizona, and they are rare in the New England states. Its breeding range is coincident with its distribution.

Genus **CENTURUS** Swainson, 1837.

Centurus carolinus (Linnaeus). Red-bellied Woodpecker.

Picus carolinus LINNÆUS, S. N., ed. 10, I, 1758, 113.

Centurus carolinus BONAPARTE Geog. and Comp. List, 1838, 40.

Melanerpes carolinus RIDGWAY, Ann. Lyc. N. Y., X, January, 1874, 378.

Popular synonyms: CAROLINA WOODPECKER. ZEBRA WOODPECKER.

The Red-bellied Woodpecker was formerly a common but now it is a rare migrant. Mr. H. K. Coale reports the taking of a male specimen in Chicago on October 29, 1876. A specimen in my collection was taken by Mr. Graham Davis in Hyde Park, Chicago, May 3, 1887. This species breeds abundantly at Kouts, Indiana. In his report, Mr. E. W. Nelson says: "A rare summer resident. Not very uncommon during the migrations. Departs the last of October." In the Ornithology of Illinois, Mr. Robert Ridgway says: "Mr. H. K. Coale informs me that he saw a pair in Lincoln Park, Chicago, in July, and that they were evidently breeding there, as he saw one of them come out of a hole in the dead top of an oak tree."

The range of this species covers the eastern and southern United States. It is rare in the northern portions, but it does occur casually as far north as Massachusetts and Michigan.

Genus **COLAPTES** Swainson, 1827.

Colaptes auratus luteus Bangs. Northern Flicker.

Cuculus auratus LINNÆUS, S. N., ed. 10, I, 1758, 112 (in part).

Picus auratus LINNÆUS, S. N., ed. 12, I, 1766, 174 (in part).

Colaptes auratus VIGORS, Zool. Journ., III, 1827, 444 (in part).

Colaptes auratus luteus BANGS, Auk, XV, April, 1898, 177.

Popular synonyms: YELLOW-HAMMER. HIGH-HOLDER. HIGH-HOLE. GOLDEN-WINGED WOODPECKER. YELLOW-SHAFTED FLICKER. WAKE-UP.

A very common resident, though a large number are somewhat migratory, arriving early in April and departing in October.

Its range covers eastern and northern North America, south to North Carolina, west to the base of the Rocky Mountains. Occasional on the Pacific slope, from California northward.

ORDER MACROCHIRES: GOATSUCKERS, SWIFTS.

FAMILY CAPRIMULGIDÆ: GOATSUCKERS, ETC.

Genus **ANTROSTOMUS** Gould, 1838.

Antrostomus vociferus (Wilson). Whip-poor-will.

Caprimulgus vociferus WILSON, Amer. Orn., V. 1812, 71, pl. 41, figs. 1-3.

Antrostomus vociferus BONAPARTE, Geog. & Comp. List, 1838, 8.

Formerly this species was a common summer resident, but now it is quite rare. It arrives the last of April and departs in September. Mr. Robert Kennicott includes this species in his list* of Cook County birds with the annotation "Abundant. Found throughout the state." He also states that it nests in Cook County. In 1876, Mr. E. W. Nelson reported† that it was a "common summer resident."

Its range includes that portion of North America east of the Great Plains, and from about latitude 50° in the interior south through eastern Mexico to Guatemala.

Genus **CHORDEILES** Swainson, 1831.

Chordeiles virginianus (Gmelin). Nighthawk.

Caprimulgus virginianus GMELIN, S. N., I, ii. 1788, 1028.

Chordeiles virginianus SWAINSON, in Sw. & Rich., Fauna Bor. Amer., II. 1831, 496.

Chordeiles popetue BAIRD, B. N. Amer., 1858, 151.

Popular synonyms: BULL BAT. WHIP-POOR-WILL.

The Nighthawk is a summer resident but it is more common during its migrations, especially that of the fall. Mr. E. W. Nelson makes the following statement:‡ "A common summer resident. Arrives the 10th of May and departs in immense flights, often lasting several hours, the first of September." Mr. Nelson also records the finding of variety *henryi* at Waukegan, a few miles north of our limits, by Mr. Rice in July, 1875. He says that this specimen was the first one taken in this vicinity.

*Trans. Illinois State Agri. Society, Vol. I, 1853-1854, 581.

†Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 1876, 114.

and adds: "The spring of 1876, I found these birds breeding, with var. *popetue* in considerable numbers among the sand hills on the Lake shore, near Waukegan. I should judge that the two forms existed in about equal numbers at that place. They are, however, less common in other localities I have visited. Among the specimens examined were individuals that exhibited a perfect intergradation of the two forms. Some specimens would have the white patch on the wings like those in typical *henryi*, while the tail was marked as in *popetue*, and vice versa. Other specimens showed a varying degree of white, on the wings and tail, between the two varieties. In none is the lightness of the back quite so prominent as in specimens from the western plains."

The range of the Nighthawk includes eastern North America, west to the Great Plains and central British Columbia, and from Labrador south through tropical America to the Argentine Republic.

FAMILY MICROPODIDÆ: SWIFTS.

Genus **CHÆTURA** Stephens, 1825.

***Chætura pelagica* (Linnaeus). Chimney Swift.**

Hirundo pelagica LINNÆUS, S. N., ed. 10, I, 1758, 192.

Cypselus pelagius BONAPARTE, Syn. 1828, 63.

Chætura pelagica STEPH., Gen. Zool., XIII, pt. ii, 1825, 76.

Popular synonyms: CHIMNEY SWALLOW, CHIMNEY SWEEP.

A common summer resident, arriving late in April and departing about the middle of September.

Its range covers eastern North America east of the Plains, and from Labrador and the Fur Countries southward. It winters south of the United States so far as known.

FAMILY TROCHILIDÆ: HUMMINGBIRDS.

Genus **TROCHILUS** Linnaeus, 1758.

***Trochilus colubris* Linnaeus. Ruby-throated Hummingbird.**

Trochilus colubris LINNÆUS, S. N., ed. 10, I, 1758, 120.

A common summer resident, arriving the last of April and departing in September. Mr. A. W. Carter found two nests of this species in May, 1905. One of these, which he found near Wolf Lake, Indiana, about the first of the month, contained fresh eggs. The other, which he saw about May 10, contained young

birds. Both of the nests were over thirty feet from the ground, and were situated near the end of the branches of a large tree.

The range of this species covers North America, east of the Plains and from the Fur countries south, in winter, to Cuba and the adjacent islands, and through Mexico to Central America. It breeds from Florida to Labrador.

ORDER PASSERES: PERCHING BIRDS.

FAMILY TYRANNIDÆ: TYRANT FLYCATCHERS.

Genus **TYRANNUS** Cuvier, 1799.

Tyrannus tyrannus (Linnæus). **Kingbird.**

Lanius tyrannus LINNÆUS, S. N., ed. 10, 1, 1758, 94.

Muscicapa tyrannus WILSON, Amer. Orn., 1, 1808, 66, pl. 13, fig. 1.

Tyrannus intrepidus VIEILLLOT, Gal. Ois., 1, 1824, 214, pl. 133.

Tyrannus carolinensis TEMM., Tabl. Meth., 1836, 24.

Tyrannus tyrannus JORDAN, Man. Vert., ed. 4, 1884, 96.

Popular synonyms: BEE BIRD. BEE MARTIN.

The Kingbird is a common summer resident, arriving late in April, and departing late in September. Mr. E. W. Nelson says: "In the summer of 1875, Mr. Rice saw one of these birds plunge repeatedly into a stream in the manner of a Kingfisher. Shooting the specimen he found its stomach contained aquatic insects."

The range of the Kingbird is extensive, including North America from the British Provinces southward, though it is less common west of the Rocky Mountains. In winter, it passes southward through Mexico and Central America to Peru and Bolivia.

Genus **MYIARCHUS** Cabanis, 1844.

Myiarchus crinitus (Linnæus). **Crested Flycatcher.**

Muscicapa crinita LINNÆUS, S. N., ed. 12, 1, 1766, 325.

Tyrannus crinitus SW., Quart. Journ., XX, 1826, 271.

Myiarchus crinitus LICHT., Nomencl. Mus. Berol., 1854, 16.

Popular synonyms: GREAT-CRESTED FLYCATCHER. GREAT YELLOW-BELLIED FLYCATCHER.

This species is a rare summer resident but is more common during its migrations. It arrives early in May and departs about the middle of September. Mr. Robert Kennicott lists it as a common summer resident.† Mr. E. W. Nelson reports it as a "rather common summer resident."

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 113.

†Trans. Illinois State Agri. Society, Vol. I, 1853-1854, 582.

The range of this species covers the eastern United States and British Possessions, west to Manitoba and the Great Plains. In winter, south to Panama and Colombia. It breeds from Florida northward.

Genus **SAYORNIS** Bonaparte, 1854.

Sayornis phœbe (Latham). **Phœbe.**

Muscicapa fusca Gmelin, S. N., I, 1788, 93 (*nee* Bodd., 1783).

Muscicapa phæbe LATHAM, Ind. Orn., II, 1790, 489.

Tyrannus fuscus NUTTALL, Man., ed. 2, I, 1840, 312.

Sayornis fuscus BAIRD, B. N. Amer., 1858, 184.

Sayornis phæbe STEINER, Auk, II, Jan. 1885, 51.

Popular synonyms: PEWEE. BARN PHOEBE. PEWIT FLYCATCHER.

The Phœbe is a common summer resident, arriving late in March and departing from the last of September to the middle of October. The Phœbe is noted for the persistency with which it will nest in a spot particularly suitable to its desires. It has been known to nest for several years in the same spot, though the nest has been repeatedly destroyed.

Its range includes the eastern United States and British Possessions, west to the eastern edge of the Great Plains, and from New Brunswick and the Mackenzie River southward. It winters from the south Atlantic and Gulf states southward, and breeds from South Carolina, Louisiana and western Texas northward.

Genus **NUTTALLORNIS** Ridgway, 1887.

Nuttallornis borealis (Swainson). **Olive-sided Flycatcher.**

Tyrannus borealis SWAINSON, in Sw. & Rich., Fauna Bor. Amer., II, 1831, 141, pl. 35.

Muscicapa cooperi NUTTALL, Man., ed. 1, 1832, 282.

Tyrannus cooperi BONAPARTE, 1838, in Nuttall's Man., ed. 2, I, 1840, 298.

Nuttallornis borealis OBERHOLZER, Auk, XVI, Oct., 1899, 331.

Contopus borealis BAIRD, B. N. Amer., 1858, 188.

This flycatcher is a very rare migrant. I have a specimen taken by Mr. Graham Davis at Forty-seventh Street and Grand Boulevard, Chicago, May 26, 1887. A pair were seen near the north pond in Lincoln Park, Chicago, on May 20, 1904, by Mr. Ruthven Deane and Mr. Herbert E. Walter. Mr. E. W. Nelson says:* "Not an uncommon migrant, from May 15th to 25th, and the last of September and first of October. I have taken one specimen as late as June 2nd. It may breed."

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 113.

The range of this species includes the whole of temperate North America, breeding from the northern border of the United States northward to British Columbia and the Saskatchewan River.

Genus **CONTOPUS** Cabanis, 1855.

Contopus virens (Linnaeus). **Wood Pewee.**

Muscicapa virens LINNÆUS, S. N., ed. 12, I, 1766, 327.

Tyrannus virens NUTTALL, MBL., ed. 2, I, 1840, 316.

Contopus virens CABANIS, J. f. O., III, 1855, 479.

The Wood Pewee is a common summer resident, arriving early in May, and departing from the first to the last of October.

The range of this species covers eastern North America, west to the Great Plains, and from southern Canada southward. It breeds nearly throughout its range in the United States and Canada. In winter, it migrates southward through eastern Mexico to Guatemala.

Genus **EMPIDONAX** Cabanis, 1855.

Empidonax flaviventris Baird. **Yellow-bellied Flycatcher.**

Tyrannula flaviventris BAIRD (W. M. & S. F.), Proc. Acad. Nat. Sci. Philadelphia, I, 1843, 283.

Empidonax flaviventris BAIRD, B. N. Amer., 1858, 198.

A rather common migrant, arriving early in April and returning in September. There are some indications that it may have nested within our limits. Dr. Hoy found it to be a summer resident in the vicinity of Racine, Wisconsin, a few miles north of our area. Mr. E. W. Nelson says:* "A common migrant. The first of July, 1873, I found them quite common in a dense swampy thicket in Northern Indiana, where they had probably nested."

Its range covers eastern North America, and it breeds from the northern United States northward. In winter it migrates southward through eastern Mexico to Colombia.

Empidonax virescens (Vieillot). **Green-crested Flycatcher.**

Muscicapa acadica GMELIN, S. N., I, 1788, 947.

Platyrhynchos virescens VIEILLOT, Nouv. Dict. d'Hist. Nat., XXVII, 1818, 22.

Empidonax acadicus BAIRD, B. N. Amer., 1858, 197.

Empidonax virescens BREWSTER, Auk, XII, April, 1895, 157.

Tyrannula acadica SW., in Bonaparte's Comp. and Geog. List, 1838, 24.

Popular synonym: **ACADIAN FLYCATCHER.**

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 114.

A not uncommon summer resident, breeding locally in the rather heavy timber in the northwestern portion of our area. It arrives early in May and departs about the twenty-fifth of September. Mr. Robert Kennicott includes this species in his list of Cook County birds* with the annotation, "Abundant," and says that it is known to nest in Cook County. Mr. E. W. Nelson says:† that it is "A rare summer resident." Mr. Robert Ridgway says:‡ "This is probably the most numerous and generally distributed species of the genus in the State."

The range of this species covers the eastern United States, excepting that it is rare or casual in the New England states. It breeds nearly throughout its range, and migrates southward to Cuba and Yucatan.

Empidonax traillii (Audubon). Traill's Flycatcher.

Muscicapa traillii AUDUBON, Orn. Biog., I, 1832, 236.

Tyrannus traillii NUTTALL, Man., ed. 2, I, 1840, 323.

Empidonax traillii BAIRD, B. N. Amer., 1858, 193.

Empidonax pusillus var. *traillii* B. B. & R., Hist. N. Amer. B., II, 1874, 369, pl. 44, fig. 8.

A not uncommon summer resident, arriving early in May and departing in September. It is more common during its migrations. Mr. B. T. Gault and the writer observed a brood of young birds, of this species, near Calumet Lake, July 10, 1896.

The range of this species includes the Mississippi Valley, from Ohio, Illinois and Michigan westward to the Pacific coast, and from the Fur Countries southward into Mexico.

Empidonax minimus Baird. Least Flycatcher.

Muscicapa acadica "GMELIN," NUTTALL, Man., I, 1832, 288 (*nec* Gmelin).

Tyrannula minima BAIRD (W. M. & S. F.), Proc. Acad. Nat. Sci. Philadelphia, July, 1843, 284.

Empidonax minimus BAIRD, B. N. Amer., 1858, 195.

A rather uncommon summer resident, arriving early in May and departing early in September.

The range of this species includes North America east of the Great Plains. It breeds from the northern United States northward, and winters southward at least into Central America. Westward it is a casual visitor to the base of the Rocky Mountains.

*Trans. Illinois State Agri. Society, Vol. I, 1853-1854, 582.

†Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 114.

‡Ornithology of Illinois, Vol. I, 1889, 357.

FAMILY ALAUDIDÆ: LARKS.

Genus **OTOCORIS** Bonaparte, 1838.**Otocoris alpestris** (Linnæus). **Horned Lark.***Alauda alpestris* LINNÆUS, S. N., ed. 10, 1758, 166.*Eremophila alpestris* BOIE, Isis, 1828, 322.*Otocoris alpestris* BONAPARTE, Nouvi Ann. Sci. Nat. Bologna, II, 1838, 407.

Popular synonyms: SHORE LARK. SNOW LARK. SKYLARK. AMERICAN SKYLARK. PRAIRIE LARK. SNOWBIRD.

The Horned Lark is a rare winter resident within our limits. No doubt its presence has been overlooked by many of our Illinois observers, for it differs from *Otocoris alpestris praticola* only in size, being larger and a trifle darker in color.*

The range of this species covers northeastern North America, Greenland and the northern parts of the Old World. In winter it passes south in the eastern United States to the Carolinas, Illinois, etc.

Otocoris alpestris praticola Henshaw. **Prairie Horned Lark.***Otocoris alpestris praticola* HENSHAW, Auk, I, July, 1884, 264.Popular synonyms: The same as *Otocoris alpestris*.

A common resident, breeding within our limits from the last of February to June.

*In his "Birds of Northeastern Illinois" (Bull. of the Essex Institute, Vol. VIII, 1876, 110), Mr. E. W. Nelson says: "Two current and readily distinguishable varieties (of alpestris) are found during the winter, one of which is also found in summer. Aware of their identity, yet wishing confirmation, I sent Mr. Ridgway specimens of the two. The winter resident he pronounced typical var. alpestris, and the permanently resident form var. leucolæma Cs."

On the strength of this knowledge, Mr. Nelson includes the variety leucolæma Coues, which is a species inhabiting the "interior of British America, and Alaska, south in winter into western United States," in his list. He gives the following note: "It is a permanent resident, found in equal numbers throughout the year. Sometimes the last of February and regularly during March and April the first set of eggs are deposited, and early in May the fully fledged young commence to appear. After a short rest the female hands the guidance of the young over to the male and resumes her work on a second set of eggs. When the second brood are able to follow, the party wander wherever inclination leads through the fall and winter, until the breeding season again approaches, when they disband."

"A remarkable characteristic of the young of leucolæma from Illinois is that they are exactly like the young of alpestris, although the young of the two varieties are, usually, even more distinct than the adults. So closely like the young of alpestris are they, that Mr. Ridgway had labelled young specimens from this vicinity, and from southern Illinois, 'alpestris,' and supposed this to be the resident variety until he received the adults above mentioned."

- Regarding the identification of the specimens sent to him by Mr. Nelson, Mr. Ridgway says in his "Revised Catalogue of the Birds of Illinois," 1881, p. 183, "Mr. Nelson includes the pale form distinguished by the name of leucolæma Coues, in his list. This, however, is an error, so far as the specimens upon which the statement was based are concerned, but one for which I am chiefly responsible. A series of specimens was submitted to me for examination, and certain examples, in very pale plumage, I pronounced to be the 'var. leucolæma.' In this I was mistaken, the individuals in question proving to be the true alpestris, in much faded summer plumage. Although it is frequently not easy to distinguish the adults of the two forms, there is never any difficulty with the young, that of leucolæma being many shades lighter in color, the difference being, moreover, absolutely constant. I was only made aware of my mistake by the subsequent inspection of young birds said to be the same form which I had previously identified as leucolæma; and, neglecting to explain the case in time, am thus responsible in great measure for the statement made by Mr. Nelson in regard to these birds, as cited above."

The range of this species includes the upper Mississippi Valley and from the region of the Great Lakes eastward to New England, breeding practically throughout this range. It winters south to South Carolina and Texas.

FAMILY CORVIDÆ: CROWS, JAYS AND MAGPIES.

Genus **PICA** Brisson, 1760.

Pica pica hudsonia (Sabine). **American Magpie.**

Corvus pica WILSON, Amer. Orn., IV, 1811, 75, pl. 35, fig. 2 (*nec* Linnaeus).

Corvus hudsonicus SABINE, App. Franklin's Journ., 1823, 25, 671.

Pica melanoleuca AUDUBON, Synop., 1839, 157.

Picus caudata var. *hudsonica* ALLEN, Bull. Mus. Comp. Zool., III, 1872, 178.

Pica pica hudsonica JORDAN, Man. Vert., ed. 4, 1884, 94.

Popular synonym: BLACK-BILLED MAGPIE.

This species is included in this list on the strength of Mr. Robert Kennicott's statement that it was "not uncommon in winter" at the time his list of Cook County birds was published.*

This is a species which ranges from the Plains westward to the Cascade Mountains and north to Alaska. It is casual visitor east and south to Michigan.

Genus **CYANOCITTA** Strickland, 1845.

Cyanocitta cristata (Linnaeus). **Blue Jay.**

Corvus cristatus LINNAEUS, S. N., ed. 10, I, 1758, 106.

Cyanurus cristatus SW. & RICH., Fauna Bor. Amer., II, 1831, 495.

Cyanocorax cristatus BONAPARTE, List, 1838, 27.

Cyanocitta cristata STRICKLAND, Ann. Nat. Hist., XV, 1845, 261.

Cyanura cristata "Sw." in Nelson's List, Bull. Essex Inst. Vol. VIII, 1876, 112.

The Blue Jay is an abundant resident.

Its range is extensive, covering the whole of North America, east of the Great Plains and from the Fur Countries on the north southward to the Gulf of Mexico. It breeds throughout its range.

Genus **CORVUS** Linnaeus, 1758.

Corvus corax principalis Ridgway. **Northern Raven.**

Corvus corax WILSON, Amer. Orn., IX, 1825, 136, pl. 75, fig. 3 (*nec* Linnaeus).

*Trans. Illinois State Agri. Society, Vol. I, 1853-1854, 585

Corvus corax var. *carnivorus* BAIRD, BREWER & RIDGWAY, Hist. N. Amer. Birds, II, 1874, 233 (in part). NELSON, Birds N. E. Illinois, Bull. Essex Inst., VIII, 1876, 112.

Corvus corax sinuatus RIDGWAY, Orn. Illinois, I, 1889, 331 (in part).

Corvus corax principalis RIDGWAY, Man. N. Amer. Birds, 1187, 361.

The raven may be considered an occasional winter and early spring visitant to our area. I have known of but two specimens being taken within our limits during the past ten years. Both of these were shot at Calumet Heights, Illinois; one by Mr. George Knowles, and the other by Mr. Richard Turtle. At different times, observers have reported the presence of the Raven within our limits. Many years ago, this species seems to have been much more common. Mr. Robert Kennicott records* it as "common throughout the state," and says that the Raven was known to nest in Cook County. Mr. E. W. Nelson says (1876): "Formerly a not uncommon resident; now occurs only in winter and is rare. Frequents the sand hills along the Lake shore from the last of October until spring." Mr. Nelson places this note under the name "*C. corax* var. *carnivorus*," which, in part at least, is a synonym of *Corvus corax principalis*.

Though nearly all the observers who have published reports on the birds of northern Illinois, have considered the Ravens of our region to be the subspecies *sinuatus*, I am convinced from the study of specimens which have come into my hands that all are the Northern Raven, or the larger form *principalis*. This opinion is also supported by the general range of the two forms, as given in the Check-list of the American Ornithologists' Union and by Dr. Ridgway in the "Birds of North and Middle America."† *Sinuatus* is a smaller form whose range barely reaches as far north, in the Mississippi Valley, as southern Illinois and southern Indiana. A specimen which I took at Meredosia, Illinois, some years ago was pronounced by Dr. Ridgway to be *principalis*, and in a recent letter, he says: "It would seem likely that the Raven of northern Illinois, at least, should be *principalis*."

This question needs further investigation and all specimens of the Raven which are taken within our limits should be carefully examined, measured and studied.

***Corvus brachyrhynchos* C. L. Brehm. American Crow.**

Corvus corone WILSON, Amer. Orn., IV, 1814, 79, pl. 25, fig. 3 (nec Linnaeus).

*Trans. Illinois State Agri. Society, Vol. I, 1853-1854, 585.

†Bull. U. S. Nat. Museum, No. 50, Part III, 259, 262.

Corvus brachyrhynchos C. L. BREHM, Beiträge zur Vögelkunde, II, 1822, p. 56.

Corvus americanus AUDUBON, Orn. Biog., II, 1834, 317.

Corvus brachyrhynchos RICHARDSON, Proc. Biol. Soc. Wash., XVI, 1903, 125.

Popular synonym: COMMON CROW.

The American Crow is an abundant resident. In his list of Cook County birds, Mr. Robert Kennicott says that the Crow was at that time (1853-1854) "Common throughout the state." Mr. E. W. Nelson, on the other hand, while listing the Crow as resident, says: "This is far from an abundant species in Northern Illinois, at any season or locality. A small number breed in the low pines on the sand hills along the Lake shore, and in winter unite in small flocks and move from place to place."

The range of the Crow includes the whole of North America from the Fur Countries on the north southward to the southern border of the United States. It is rare or local in the interior western districts.

FAMILY ICTERIDÆ: BLACKBIRDS, ORIOLES, ETC.

Genus **DOLICHONYX** Swainson, 1827.

Dolichonyx oryzivorus (Linnaeus). **Bobolink.**

Fringilla oryzivora LINNÆUS, S. N., ed. 10, I, 1758, 179.

Icterus agripennis BONAPARTE, Obs. Wilson, 1824, No. 87.

Dolichonyx oryzivorus SWAINSON, Zool. Journ., 111, 1827, 351.

Popular synonyms: BOB LINCOLN. REED BIRD. RICE BIRD. SKUNK BLACKBIRD.

The Bobolink is a common summer resident, arriving the last of April and departing about the middle of October.

The range of this species covers eastern North America, westward to Nevada, Utah and Idaho, and from Ontario and Manitoba southward in winter to the southern portions of South America. It breeds from the middle states northward.

Genus **MOLOTHRUS** Swainson, 1831.

Molothrus ater (Boddaert). **Cowbird.**

Oriolus ater BODDAERT, Tabl. Pl. Enlum., 1783, 37.

Icterus pecoris BONAPARTE, Obs. Wilson, 1824, No. 88.

Fringilla ambigua NUTTALL, Man., I, 1832, 484 (= young).

Molothrus pecoris SWAINSON, Fauna Bor. Amer., II, 1831, 277.

Molothrus ater GRAY, Hand-List, II, 1870, 36, No. 6507 (after Boeld, Pl. Enlum., 606, fig. 1).

Popular synonyms: COW BLACKBIRD. COW BUNTING. COWPEN BUNTING. CLODHOPPER.

An abundant summer resident, arriving early in April and departing in October.

The range of the Cowbird covers North America from the Atlantic to the Pacific, and from the southern portion of the British Possessions southward, in winter, into Mexico.

Genus **XANTHOCEPHALUS** Bonaparte, 1850.

Xanthocephalus xanthocephalus (Bonap.) **Yellow-headed Blackbird.**

Icterus xanthocephalus BONAPARTE, Journ. Acad. Nat. Sci. Philadelphia, V, 1826, 223.

Agelaius xanthocephalus SW. & RICH., Fauna Bor. Amer., II, 1831, 281.

Icterus icterocephalus BONAPARTE, Amer. Orn., I, 1835, 27, pl. 3.

Xanthocephalus icterocephalus BAIRD, B. N. Amer., 1858, 531.

Xanthocephalus xanthocephalus JORDAN, Man. Vert., ed. 4, 1884, 92.

A common summer resident, arriving the last of April and departing in September. This Blackbird once nested in vast numbers in the Calumet region but is becoming scarcer each year, for the smaller marshes and lakes are being rapidly drained for commercial and agricultural purposes. Unlike the Red-winged Blackbird, the male of this species is very shy during the breeding season.

The range of this species covers western North America from Wisconsin, Illinois, Kansas and Texas to the Pacific coast, and from the Sakatchewan River southward into Mexico. It is also a casual visitor to some of the eastern states, Florida and Cuba.

Genus **AGELAIUS** Vieillot, 1816.

Agelaius phœniceus (Linnæus.) **Red-winged Blackbird.**

Oriolus phœniceus LINNÆUS, S. N., ed. 12, I, 1766, 161.

Agelaius phœniceus VIEILLOT, Nouv. Dict. d'Hist. Nat., XXXIV, 1819, 539.

Icterus phœniceus DAUD., Licht., Verz., 1823, No. 128.

Popular synonyms: RED-WINGED STABLING. SWAMP BLACKBIRD. RED-SHOULDERED BLACKBIRD.

The Red-winged Blackbird is an abundant summer resident, arriving early in March and departing when the severely cold weather sets in.

The range of this species includes temperate North America, from the Fur Countries southward, in winter, as far as Costa Rica. It breeds in suitable places from Texas northward nearly throughout its range.

Genus **STURNELLA** Vieillot, 1816.**Sturnella magna** (Linnaeus). **Meadowlark.***Alauda magna* LINNAEUS, S. N., ed. 10, 1, 1758, 167.*Sturnus ludovicianus* LINNAEUS, S. N., ed. 12, 1, 1766, 290.*Sturnella magna* SWAINSON, Phil. Mag., 1, 1827, 436.Popular synonym: **FIELDLARK.**

The Meadowlark is a common summer resident, arriving in March and departing when severely cold weather sets in. In 1876 Mr. E. W. Nelson recorded it as "an abundant summer resident," and also states that "in mild winters a few are resident."

The range of the Meadowlark covers the eastern United States and British Possessions west to the Great Plains. It breeds from the Gulf of Mexico northward.

Sturnella neglecta Audubon. **Western Meadowlark.***Sturnella neglecta* AUDUBON, B. Amer., VII, 1843, 339, pl. 487.*Sturnella magna* var. *neglecta* ALLEN, Bull. M. C. Z., III, No. 2, July, 1872, 178.Popular synonym: **WESTERN FIELDLARK.**

The only record that I have found of the taking of the Western Meadowlark within the limits of our area, is that of Mr. E. W. Nelson, who says:† "A regular but rather rare summer resident upon prairies. A more frequent visitant during migrations. A fine specimen is in the collection of my friend Mr. A. W. Brayton, taken near Chicago the last of May, 1876. This form is probably a common summer resident upon the prairies in the western portion of the state."

The range of this Meadowlark covers the western United States, east to the prairie districts of the Mississippi Valley, Illinois, Wisconsin, and from British Columbia and Manitoba, south through central and western Mexico.

Genus **ICTERUS** Brisson, 1760.**Icterus spurius** (Linnaeus). **Orchard Oriole.***Oriolus spurius* LINNAEUS, S. N., ed. 12, 1, 1766, 162.*Icterus spurius* BONAPARTE, Journ. Acad. Nat. Sci. Philadelphia, III, 1823, 363.Popular synonyms: **BROWN ORIOLE. CHESTNUT-COLORED ORIOLE.**

While the Orchard Oriole was formerly common, it is now a rather uncommon summer resident, arriving early in May and departing in August. I am informed by Mr. J. Grafton Parker,

†Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 111.

Jr., that in June, 1880, he found the Orchard Oriole breeding abundantly in apple orchards near Evanston, Illinois.

The range of this Oriole includes the United States east of the Plains, and from near the northern border south, in winter, as far as Colombia. It breeds throughout its United States range.

Icterus galbula (Linnaeus). **Baltimore Oriole.**

Coracias galbula LINNÆUS, S. N., ed. 10, 1758, 108.

Oriolus baltimore LINNÆUS, S. N., ed. 12, I, 1766, 162.

Icterus baltimore DAUD., Tr. Orn., II, 348.

Icterus galbula COUES, Bull. Nutt. Orn. Club, V, April, 1880, 98.

Popular synonyms: GOLDEN ORIOLE. GOLDEN ROBIN. HANGING BIRD. FIRE BIRD. PEA BIRD.

The Baltimore Oriole is a common summer resident, arriving the last of April and departing in September.

Its range extends throughout eastern temperate North America, west quite to the base of the Rocky Mountains, and south, in winter, through Mexico to Colombia. It breeds chiefly north of latitude 35°.

Genus **EUPHAGUS** Cassin, 1866.

Euphagus carolinus (Müller). **Rusty Blackbird.**

Turdus carolinus MÜLLER, Syst. Nat., Suppl., 1776, 140.

Quiscalus ferrugineus BONAPARTE, Obs. Wils., 1824, No. 46.

Scolecophagus ferrugineus SWAINSON, in Sw. & Rich., Fauna Bor. Amer., II, 1831, 286.

Scolecophagus carolinus RIDGWAY, Proc. U. S. Nat. Mus., VIII, 1885, 356.

Euphagus carolinus RICHMOND, Proc. Biol. Soc. Washington, XVI, 1903, 128.

Popular synonym: RUSTY GRACKLE.

This species is an abundant migrant, arriving early in March and remaining until the last of April. In the fall it returns about the first of October and departs for its winter home when the severely cold weather sets in.

Its range includes eastern North America, west to Alaska and the Great Plains. It breeds from northern New England and Michigan northward and in Alaska.

Euphagus cyanocephalus (Wagler). **Brewer's Blackbird.**

Psarocolius cyanocephalus WAGLER, Isis, 1829, 758.

Scolecophagus cyanocephalus CABANIS, Mus. Hein., I, 1851, 193.

Euphagus cyanocephalus RICHMOND, Proc. Biol. Soc. Washington, XVI, 1903, 128.

Popular synonyms: VIOLET-HEADED BLACKBIRD. BLUE-HEADED BLACKBIRD.

This species is included in this list on the strength of the following statement of Mr. E. W. Nelson, who says: "A very rare visitant in company with the preceding (*Rusty Blackbird*)."
It is also very rarely seen in other portions of Illinois. Mr. Robert Ridgway says* that he had observed but a single specimen, "a female shot at Mount Carmel in December, 1866, and now in the collection of the National Museum at Washington."

The range of Brewer's Blackbird extends from Minnesota, Nebraska, Kansas, Indian Territory, and Texas westward to the Pacific coast, and from the Saskatchewan region southward to Mexico. During its migrations it has been observed in Wisconsin, Illinois, Iowa, Missouri and Louisiana.

Genus **QUISCALUS** Vieillot, 1816.

Quiscalus quiscula æneus (Ridgway). **Bronzed Grackle.**

Quiscalus æneus RIDGWAY, Proc. Acad. Nat. Sci. Philadelphia, June, 1869, 134.

Quiscalus quiscula æneus STEJNEGER, Auk, II. Jan., 1885, 43, Foot-note.

Quiscalus purpureus æneus RIDGWAY, Nom. N. Amer. B., 1881, No. 278b.

Popular synonyms: WESTERN CROW BLACKBIRD. CROW BLACKBIRD.

The Bronzed Grackle is a common summer resident, arriving early in March, and departing when the cold weather sets in.

The range of this species extends from the Alleghanies and southern New England north to Newfoundland and the Great Slave Lake, west to the eastern base of the Rocky Mountains, and south to Louisiana and Texas.

FAMILY FRINGILLIDÆ: GROSBEAKS, FINCHES,
SPARROWS, ETC.

Genus **HESPERIPHONA** Bonaparte, 1850.

Hesperiphona vespertina (W. Cooper). **Evening Grosbeak.**

Fringilla vespertina COOPER, Ann. Lyc. N. Y. I., ii, 1825, 220.

Coccothraustes vespertina Sw. & Rich., Fauna Bor. Amer., II, 1831, 269, pl. 68.

Hesperiphona vespertina BONAPARTE, Conspectus Avium, I, 1850, 505.

The Evening Grosbeak is a very irregular winter visitant to our area. I took a specimen at River Forest on January 13, 1887, and another at Englewood in March, 1888. Mr. B. T. Gault informs me that on December 25, 1886, he observed five

*Ornithology of Illinois, Vol. I, 1889, 324.

in Garfield Park, Chicago, where they were feeding upon the keys of the box elder. Mr. E. W. Nelson says:* "The winter of 1871 they were quite common throughout the northern portion of the state. The following winter they were much rarer, and since then but very few have been seen. I am told that formerly, it was of much more regular occurrence." The following records of the occurrence of this species within our limits I take from Mr. Amos W. Butler's report on "The Birds of Indiana":† "Five specimens were shot by Mr. H. K. Coale at Whiting, Indiana, on December 20, 1883. Two females were taken near Lake George, Indiana, December 5, 1886, which are now in the collection of Mr. G. Fream Morcom, San Diego, California. In Mr. Morcom's collection I (Mr. Butler) saw six males and two females, marked Berry Lake, Indiana, April 3, 1887; also four females from the same locality, April 18, 1887, and a male and female, dated May 10, 1887. Mr. R. Turtle, a taxidermist of Chicago, showed me (Mr. Butler) a number of these birds, of which he said he killed ten, May 8, 1887, at Berry Lake, Indiana, and thirteen May 10, at Whiting. The latest record I have of its occurrence in spring is May 13, 1887, when it was found in Lake County, Indiana. Mr. L. T. Meyer reported them from Whiting, Lake County, Indiana, in January and February, 1890." Mr. H. K. Coale has furnished me with the following interesting record: "On February 11, 1887, Mr. E. A. Colby shot twelve Evening Grosbeaks in Chicago which he presented to me in the flesh. He also saw several flocks during the winter feeding on the buds of trees."

The above records indicate that during the years 1886 and 1887 there was a rather phenomenal appearance of the Grosbeaks within the limits of our area. During recent years while this species has been a constant it could hardly be considered a common winter visitant, though the number of individuals observed has been quite large during some seasons.

The home of the Evening Grosbeaks is in the coniferous forests of the northwest. Their range includes the western British Provinces, east to Lake Superior; in the Rocky Mountains south into the United States and eastward irregularly in winter to Michigan and Indiana and, casually, to the Atlantic coast.

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 104.

†Twenty-second Annual Report Dept. of Geol. and Nat. Resources, Indiana, 1897, 912, 913.

(Genus **PINICOLA** Vieillot, 1807.

Pinicola enucleator canadensis (Cabanis). **Canadian Pine Grosbeak.**

Loxia enucleator LINNÆUS, S. N., ed. 12, I, 1766, 299, part (*nec* 1858).

Pyrrhula enucleator BONAPARTE, Syn. 1828, 119.

Pinicola canadensis CABANIS, Mus. Hein., I, Aug., 1851, 167.

Pinicola enucleator COUES, Key N. Amer. Birds, 1872, 127, (part).

Pinicola enucleator B. *canadensis* RIDGWAY, Bull. Nutt. Orn. Club, April, 1878, 66.

The Canadian Pine Grosbeak is a very rare and irregular winter visitant. The only records that I have for its occurrence during recent years within our limits are the following. In January, 1887, I took a specimen at River Forest. In December, 1885, Mr. John F. Ferry took a number of specimens from a flock at Lake Forest. It seems to have been more common many years ago. Mr. E. W. Nelson says: "Formerly common; now a rare winter visitant." In his "Birds of Indiana" Mr. Amos W. Butler states that Mr. George L. Toppan "once noted it in Lake County, Indiana, and thinks it was in the winter of 1884-1885."

Its range includes the coniferous forests of the northern portions of North America and the breeding range extends from northern New England and Minnesota, and in the Rocky Mountains in Colorado northward nearly to the limit of trees. In the winter it migrates southward into the United States especially in the northeastern portion.

(Genus **CARPODACUS** Kaup, 1829.

Carpodacus purpureus (Gmelin). **Purple Finch.**

Fringilla purpurea GMELIN, S. N., I, ii, 1788, 923.

Carpodacus purpureus GRAY, Gen. B., II, 1844, 384.

Popular synonyms: PURPLE LINNET. PURPLE GROSBREAK. ROSE LYNNEE. ROSEATE GROSBREAK OR FINCH. STRAWBERRY BIRD.

The Purple Finch is an irregular migrant and a not uncommon winter resident. It arrives in the fall in September and remains until May. I have no records of its breeding within our limits. That it has nested in northern Illinois, however, is shown by the following records. Mr. E. W. Nelson says:* "Common winter resident; a few breed." Professor W. W. Cooke states† that its eggs have been taken at Polo, Ogle County.

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 105.

†Bird Migration in the Mississippi Valley, p. 179.

Illinois. And according to Mr. Nehrling† this Finch has been taken at Waukegan, Illinois, during the breeding season.

The range of the Purple Finch covers the whole of eastern North America, from the Gulf of Mexico northward to Labrador and the Saskatchewan River, and from the Atlantic coast westward to the Plains. It breeds from Illinois and Pennsylvania northward though chiefly north of the United States.

Genus **LOXIA** Linnæus, 1758.

Loxia curvirostra minor (Brehm). **American Crossbill.**

Loxia curvirostra FORSTER, Phil. Trans., LXII, 1772, 402 (*nec* Linnæus).

Crucirostra minor BREHM, Naumannia, 1853, 193.

Loxia curvirostra var. *americana* COUES, Key, 1872, 351.

Loxia curvirostra minor RIDGWAY, Proc. U. S. Nat. Mus., VIII, 1885, 354.

Popular synonyms: **RED CROSSBILL. AMERICAN RED CROSSBILL.**

This Crossbill is an irregular and very erratic winter visitant. In May, 1899, I obtained three specimens from a large flock in the woods bordering Wolf Lake, Indiana. Nearly every winter it may be seen in the woods near Lake Forest, Illinois, about twenty-four miles north of Chicago. According to Mr. Amos W. Butler,* Mr. C. E. Aiken observed them in Lake County, Indiana, and in Cook County, Illinois, during the years 1869 and 1870. They were again observed in Lake County, Indiana, in May, 1887. Mr. Aiken also informed Mr. Butler that "they became very abundant in the vicinity of Chicago, including Lake County, Indiana, in July and August, 1869, and remained until late in the fall. They fed greedily on sunflower seeds, and were so sluggish that one could approach within a few feet of them, so that they fell an easy prey to boys with catapults." Mr. E. W. Nelson says:† "Formerly a common winter resident; now rare."

The range of the American Crossbill covers temperate North America, and it breeds from the northern portions of the United States northward to certain portions of Alaska. It also breeds sparingly in the higher portions of the eastern United States, and in the Alleghanies. In many localities of the more southern portion of its range it is irregularly abundant in winter.

Loxia leucoptera Gmelin. **White-winged Crossbill.**

Loxia leucoptera GMELIN, S. N., I, ii, 1788, 540.

*Birds of Indiana. Twenty-second Annual Report, Dept. Geol. and Nat. Resources, Indiana, 1897, 919.

†Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 1876, 105.

‡North American Birds, Pt. IX, 31.

Curvirostra leucoptera WILSON, Amer. Orn., IV, 1811, 48, pl. 31, fig. 3.

The White-winged Crossbill is a very rare winter visitant. The first record I have of the capture of this species is that of a specimen in the collection of Mr. B. T. Gault which was taken near Chicago in the seventies. In the year 1894, from the ninth to the twentieth of November, enormous flocks of these Crossbills passed along the lake shore and many were shot with sling-shots by boys. I have several fine specimens which were taken by Mr. Claude Tallman at Morgan Park, Illinois, on November 9, 1894. Mr. Amos W. Butler states,‡ that during the summer of 1869, Mr. C. E. Aiken found this species in the vicinity of Chicago, and in Lake County, Indiana, in company with the American Crossbill, and that they remained throughout the winter succeeding. Mr. E. W. Nelson says:* "A winter resident of rare occurrence at present."

The range of this species covers northern North America, breeding from northern New England and the northern Rocky Mountain districts in the United States northward.

Genus **ACANTHIS** Bechstein, 1803.

Acantsis hornemannii exilipes (Cones), **Hoary Redpoll.**

Egiothus exilipes COUES, Proc. Acad. Nat. Sci. Philadelphia, 1861, 385.

Acanthis hornemannii exilipes STEJNEGER, Auk, I, April, 1884, 152.

Egiothus caucaseus CABANIS, of some authors.

Popular synonyms: MEALY REDPOLL. HOARY LINNET. WHITE-RUMPED REDPOLL.

Regarding the occurrence of this species within our limits, Mr. Robert Ridgway says:† "I have seen specimens in the collection of Mr. E. W. Nelson, that were collected in the vicinity of Chicago, but I am unable to give dates of their capture." Mr. Nelson himself says: "Rare winter visitant with the preceding (*Acanthis linaria*)."

This species ranges through Arctic America and northeastern Asia, migrating southward at times to the northern United States.

Acanthis linaria (Linnaeus). **Redpoll.**

Fringilla linaria LINNÆUS, S. N., ed. 10, I, 1758, 182.

Acanthis linaria BONAPARTE, & SCHLEG., Mon. Lox., 1850, 48.

Linaria minor SW. & RICH., Fauna Bor. Amer., II, 1831, 267.

‡Birds of Indiana. Twenty-second Annual Report, Dept. Geol. and Nat. Resources, Indiana, 1897, 921.

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol VIII, 1876, 105.

†Ornithology of Illinois, Vol. I, 1889, 233.

Ægiothus linarius CABANIS, Mus. Hein., 1851, 161.

Popular synonyms: LESSER REDPOLL. COMMON REDPOLL. DUSKY REDPOLL. SNOWBIRD. REDPOLL LINNET.

The Redpoll is a common winter resident, arriving in flocks about the last of October and remaining until the first of April.

The range of this species covers the northern portion of the northern hemisphere, breeding north of the United States and passing southward in winter at times as far as Virginia and Kansas and quite regularly to the middle United States.

***Acanthis linaria holboëllii* (Brehm). Holboll's Redpoll.**

Linaria holboëllii BREHM, Handb. Vög. Deutschl., 1831, 280.

Acanthis linaria B. Holboëllii DUBOIS, Consp. Av. Europe, 1871, 18.

The only record of the occurrence of this species within our limits that I have been able to find is that of a female taken in Chicago by Mr. George F. Clingman on November 2, 1878, and recorded by Mr. H. K. Coale in the Bulletin of the Nuttall Ornithological Club, Volume VIII, page 239.

This Redpoll ranges through the northern portions of the northern hemisphere and near the seacoast. In North America it passes southward in winter to northern New York and Massachusetts.

***Acanthis linaria rostrata* (Coues). Greater Redpoll.**

Ægiothus rostratus COUES, Proc. Acad. Nat. Sci. Philadelphia, 1861, 378.

Acanthis linaria rostrata STEJNEGER, Auk, I, April, 1884, 153.

The Greater Redpoll is a rare winter visitant. There is a specimen in the collection of The Chicago Academy of Sciences taken in the seventies by Mr. C. N. Holden, which is in the plumage of the young male. Mr. H. K. Coale also reports this species as being found in the vicinity of Chicago. It probably occurs with *Acanthis linaria*.

Its range includes northeastern North America and Greenland. It is a somewhat irregular winter visitant to New England, New York and Illinois.

Genus **ASTRAGALINUS** Cabanis, 1851.

***Astragalinus tristis* (Linnæus). American Goldfinch.**

Fringilla tristis LINNÆUS, S. N., ed. 10, I, 1758, 181.

Chrysomitris tristis BONAPARTE, List, 1838, 33.

Astragalinus tristis CABANIS, Mus. Hein., I, July, 1851, 159.

Spinus tristis STEJNEGER, Auk, I, October, 1884, 362.

Popular synonyms: SUMMER YELLOW-BIRD. LETTUCE-BIRD. THISTLE-BIRD. BLACK-WINGED AND BLACK-CAPPED YELLOW-BIRD.

The American Goldfinch is a very common resident of our area. In the winter the plumage of the male is changed to more somber colors, resembling those of the female. "The yellow is replaced by a yellowish brown; the black of the crown wanting, that of the wings and tail browner. The throat is generally yellowish; the under parts ashy brown passing behind into white."

The range of this species covers the whole of temperate North America, and it breeds nearly throughout its geographical range.

Genus **SPINUS** Koeh, 1816.

Spinus pinus (Wilson). **Pine Siskin.**

Fringilla pinus WILSON, Amer. Orn., II, 1810, 133, pl. 17, fig. 1.

Chrysomitris pinus BONAPARTE, Geog. and Comp. List, 1838, 33.

Spinus pinus STEJNEGER, Auk, I, 1884, 362.

Popular synonyms: PINE FINCH. PINE LINNET. PINE GOLDFINCH.

The Pine Siskin is a winter migrant and an irregular winter resident within our limits. It often associates with *Astragalinus tristis*. It arrives early in October and departs late in May. It may rarely frequent this region during the summer, for Dr. Jordan has taken a specimen near Indianapolis, Indiana, in mid-summer, and, according to Mr. Amos W. Butler, "one was observed at Wabash, Indiana, with goldfinches, several times between June 10 and 20, 1892." Mr. E. W. Nelson says:* "A common winter resident associating with the preceding."

The range of the Pine Siskin covers North America in general, breeding in British America, in the high mountain regions of the western United States and Mexico and also, though sparingly, in the higher regions of the northeastern United States. It winters irregularly throughout the greater portion of the United States.

Genus **PASSERINA** Vieillot, 1816.

Passerina nivalis (Linnaeus). **Snowflake.**

Emberiza nivalis LINNÆUS, S. N., ed. 10, I, 1758, 176.

Passerina nivalis VIEILLLOT, Fauna Franc., 1820, 86.

Plectrophenax nivalis STEJNEGER, Proc. U. S. Nat. Mus., V, 1882, 33.

Popular synonyms: WHITE SNOWBIRD. SNOW BUNTING.

The Snowflake is an irregular winter visitant, and may be looked for from early in November until the middle of the fol-

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 205.

lowing March. In November, 1891, Mr. J. Grafton Parker, Jr. and myself observed the shores of Wolf and Hyde lakes, Indiana, almost covered with these birds and they were so tame that we tried to catch them with our hands. Mr. Parker also found them very abundant on the beach at Miller's, Indiana, on December 17, 1895. Mr. E. W. Nelson says:* "An abundant winter resident. The fifth of March, 1875, I saw a flock of these birds in a tree in Chicago. The males were chanting a very low and somewhat broken, but very pleasant song, bearing considerable resemblance to that of *Spizella monticola*."

The range of the Snowflake is quite extensive, covering the northern portion of the northern hemisphere, southward in winter into the northern United States, occasionally being observed as far south as Georgia, Kentucky and Kansas.

Genus **CALCARIUS** Bechstein, 1803.

Calcarius lapponicus (Linnaeus). **Lapland Longspur.**

Fringilla lapponica LINNÆUS, S. N., ed. 10, I, 1758, 180.

Plectrophanes lapponica SELBY, Trans. Linn. Soc., XV, 1827, 156, pl. 1.

Calcarius lapponicus STEJNEGER, Proc. U. S. Nat. Mus., V, June 5, 1882, 33.

Popular synonym: **BROWN SNOWBIRD.**

This Longspur is a common winter resident, and is abundant during the fall and spring migrations. It may often be seen in very large flocks on the prairies of our area. It arrives in September and remains with us until spring, nearly all departing by the last of April and after they have obtained their spring plumage. A few tarry and I have taken them as late as the third of May. Mr. B. T. Gault took an adult female in full summer plumage at Sheffield, Indiana, on June 14, 1889. He says:† "The bird was alone and seemed to be thoroughly at home with her surroundings, being shot near the sand hills close to the lake shore. She was quite fat and appeared to be in excellent condition, but the ovaries showed no approach of the breeding season." Mr. E. W. Nelson speaks of an unusually large flight of Longspurs which took place on the twentieth of March, 1873. He says:‡ "A continuous series of large flocks occupied over two hours in passing."

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 105.

†Auk, Vol. VI, July, 1889, 278.

‡Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 106.

The range of this species covers the northern part of the northern hemisphere, and in winter it migrates southward to Kansas, Colorado and Kentucky, in fact during the winter it is abundant in the interior of the United States. It has also been observed in South Carolina and as far south as Texas.

***Calcarius pictus* (Swains.). Smith's Longspur.**

Emberiza (Plectrophanes) picta SWAINSON, in Sw. & Rich., Fauna Bor. Amer., II, 1831, 250, pl. 49.

Plectrophanes pictus BONAPARTE, Geog. and Comp. List, 1838, 37.

Calcarius pictus STEJNEGER, Proc. U. S. Nat. Mus., V, June 5, 1882, 33.

Popular synonyms: PAINTED LONGSPUR OR BUNTING. SMITH'S BUNTING. PAINTED LARK BUNTING.

Smith's Longspur is an irregular migrant in our vicinity. Mr. E. W. Nelson records this species as a common migrant, and says:* "March 30, 1875, near Lake Calumet, I found a flock containing about seventy-five individuals." I have been unable to find any records of its appearance, within our limits, since the date of Mr. Nelson's observation until May 5, 1893, when this species appeared in greater numbers than *Calcarius lapponicus*, and seemed to prefer the elevated portions of the ground in the vicinity of Worth Township. In their spring migrations, these Longspurs arrive the last of March and remain until May; in the fall, they return about the first of October. In the collection of the Field Columbian Museum there are four specimens which were taken at Worth, May 3, 1894. In the year 1896 Smith's Longspurs seemed to be quite abundant. As recorded by Mr. Amos W. Butler, in his Birds of Indiana,† in the spring of 1896, "They were first seen near Chicago, April 16, where Mr. Eliot Blackwelder saw about a hundred, two days later. Mr. C. A. Tallman reported seeing a hundred and fifty. Each of these gentlemen saw them repeatedly that spring, as did also Mr. Parker." In the fall of the same year Mr. Butler says that a flock of fifty were seen in Cook County by Mr. C. A. Tallman on the third of October and that others were seen on the eleventh of the same month.

The range of this species extends from the Arctic coast southward through the interior of North America to Texas. It breeds in the far north.

*Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 1876, 106.
†Twenty-second Annual Report, Dept. Geol. and Nat. Resources, Indiana, 1897, 952.

Genus **POECETES** Baird, 1858.**Poecetes gramineus** (Gmelin). **Vesper Sparrow.***Fringilla graminea* Gmelin, S. N., I. ii. 1788, 992.*Emberiza graminea* Wilson, Amer. Orn., IV, 1811, 51, pl. 31, fig. 5.*Poecetes gramineus* Baird, B. N. Amer., 1858, 447.

Popular synonyms: GRASS FINCH. BAY-WINGED BUNTING.

A common summer resident, arriving in April and departing the last of September.

Its range covers North America east of the Plains, and from Nova Scotia and Ontario southward. It breeds chiefly north of Virginia, Kentucky and Missouri, and winters chiefly south of that latitude.

Genus **PASSERCULUS** Bonaparte, 1838.**Passerculus sandwichensis savanna** (Wilson). **Savanna Sparrow.***Fringilla savanna* Wilson, Amer. Orn., III, 1811, 55, pl. 22, fig. 2.*Emberiza savanna* Audubon, Syn., 1839, 103.*Passerculus savanna* Bonaparte, Geog. and Comp. List, 1838, 33.*Passerculus sandwichensis savanna* Ridgway, Proc. U. S. Nat. Mus., III, 1880, 178.*Ammodramus sandwichensis savanna* Ridgway, Proc. U. S. Nat. Mus., VIII, 1885, 354.

Popular synonyms: GRASS BIRD. GROUND BIRD. GRASSHOPPER SPARROW.

The Savanna Sparrow is a common summer resident, arriving the last of March and departing in October.

The range of this species covers eastern North America, breeding chiefly north of the United States and wintering chiefly south of latitude 40°.

Genus **COTURNICULUS** Bonaparte, 1838.**Coturniculus savannarum passerinus** (Wilson). **Grasshopper Sparrow.***Fringilla passerina* Wilson, Amer. Orn., III, 1811, 76, pl. 26, fig. 5.*Fringilla savannarum* Nuttall's Man., I, 1832, 491.*Coturniculus passerinus* Bonaparte, Geog. and Comp. List, 1838, 32.*Ammodramus passerinus* Gray, Gen. of B., II, 1844, 373.*Ammodramus savannarum passerinus* Ridgway, Proc. U. S. Nat. Mus., VIII, September 2, 1885, 355.*Coturniculus savannarum passerinus* Ridgway, Proc. U. S. Nat. Mus., VIII, October, 1885, 568.

Popular synonyms: YELLOW-WINGED SPARROW. GRASSHOPPER BIRD. GRASSBIRD. GROUND BIRD.

The Grasshopper Sparrow is a common summer resident, arriving early in April and departing about the middle of September.

The range of this species covers the eastern United States from southern Canada southward, in winter to the southern states, eastern Mexico, and south to Costa Rica. It breeds throughout its range excepting in the more southern portions.

Genus **AMMODRAMUS** Swainson. 1827.

Ammodramus henslowii (Audubon). **Henslow's Sparrow.**

Emberiza henslowii AUDUBON, Orn. Biog., I, 1831, 360, pl. 77.

Coturniculus henslowi BONAPARTE, Geog. and Comp. List, 1838, 32.

Ammodramus henslowi GRAY, Gen. B., II, June, 1849, 374.

Popular synonym: HENSLOW'S BUNTING.

Henslow's Sparrow is a not uncommon summer resident, arriving about the middle of April and departing by the last of September.

The range of this species covers the eastern United States, west to the Plains, breeding as far north as Massachusetts and northern Illinois and wintering in the southern states.

Ammodramus leconteii (Audubon). **Leconte's Sparrow.**

Emberiza leconteii AUDUBON, B. Amer., VII, 1843, 338, pl. 488.

Coturniculus lecontei BONAPARTE, Consp. Av., I, 1850, 481.

Ammodramus leconteii GRAY, Gen. B., II, June, 1849, 374.

Popular synonym: LECONTE'S BUNTING.

Leconte's Sparrow is a rare migrant within our limits. It arrives about the middle of April, and returns in the fall in September. Regarding this species, Mr. E. W. Nelson says:* "I obtained a fine specimen May 13, 1875, at Riverdale, Illinois, and by my notes I see that a second specimen was observed the 21st of the same month near where the first was obtained. The specimen in my possession was flushed from a small depression in the prairie near the Calumet River, where the moisture had caused an early growth of coarse grass, about three inches in height. After darting off in an erratic course a few rods, it suddenly turned, and alighting ran rapidly through the grass, from which it was with difficulty started again and secured." In a similar habitat and on the Desplaines River at Worth, Mr. Eliot Blackwelder and myself have observed a number of these Sparrows each spring. Mr. Blackwelder also saw them at the same place on September 16, 1896. Mr. B. T. Gault saw this Sparrow in Du Page County on September 11, 1894. A male

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 107.

was taken by Mr. Harry Swarth at Worth in our area, on October 12, 1905.

The range of Leconte's Sparrow extends from Manitoba southward (in winter) to Texas, and from the eastern portion of the Plains eastward through the prairie districts of the Mississippi Valley, wintering in South Carolina, Alabama and Florida.

***Ammodramus nelsoni* Allen. Nelson's Sparrow.**

Ammodramus caudacutus var. *nelsoni* ALLEN, Proc. Bost. Soc. Nat. Hist., XVII, March, 1875, 293.

Ammodramus nelsoni NORTON, Proc. Portland Soc. Nat. Hist., II, March 15, 1897, 102.

Popular synonym: NELSON'S SHARP-TAILED FINCH.

Nelson's Sparrow is of peculiar interest to the ornithologists of our vicinity, for the type specimens upon which Mr. Allen based his opinion that it should be made a variety of the sharp-tailed sparrow *Ammodramus caudacutus*, of the salt marshes of the Atlantic, came from within our limits. Mr. E. W. Nelson, writing to Mr. Allen regarding the finding of this species, says* "While collecting birds on the Calumet Marshes at Ainsworth, Illinois, September 17, 1874, I noticed a number of small sparrows in the tall grass along the Calumet River. At first I thought they were Swamp Sparrows; observing a difference I shot one and at once recognizing it, I went in search of more. Within an hour I had killed eight fine specimens. They were very abundant, as I must have seen over one hundred in walking about a mile and a half. They were very difficult to kill, owing to their habit of rising suddenly, darting off in an irregular manner for a few rods, and then dropping into the grass and lying so close that it was almost impossible to put them up again * * * Dr. Velie, while collecting near Ainsworth, October 7, also shot several specimens of the Sharp-tailed Finch, about the sloughs which are found abundantly in this locality." Mr. Nelson also says:† "The 12th of June, 1875, I saw several of these birds in the dense grass bordering Lake Calumet, where they were undoubtedly breeding. The first of October, 1875, I again found them abundant on the Calumet Marsh, and also found them numerous in the wild rice bordering Grass Lake, Lake County, Illinois, the 10th of November the same year."

*Proc. Bost. Soc. Nat. Hist. XVII, March, 1875, 293.

†Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 107.

I have taken the nest and eggs of this species from near Calumet Lake, and have also observed the birds at Liverpool, Indiana. I do not know at what date they arrive in the spring, but the fall records would seem to show that they pass through our vicinity during September and October. Nelson's Sparrow has also been taken by Mr. S. F. Dayton, who found it at Hyde Lake on October 6, 1898; by Mr. J. Grafton Parker, Jr., who found it on the wet prairies along the east shore of Lake Calumet on September 19, 1893; and by Mr. Eliot Blackwelder, who found it breeding, though uncommon, in the vicinity of Morgan Park, on September 28, 1895. A male specimen was taken by Mr. Harry Swarth at Worth, situated within our limits, on October 12, 1905. Mr. Amos W. Butler states that he has a specimen from Hyde Park, Illinois, taken September 21, 1878, and says, in his *Birds of Indiana*:* "Mr. H. K. Coale informs me that he saw about a dozen Sharp-tailed Finches in the grass along Berry Lake, Lake County, Indiana, September 25, 1875. Dr. A. W. Brayton informed me he had taken this species in Lake County, Indiana."

This Sparrow frequents the fresh water marshes of the interior of the United States and southern Canada, breeding from northern Illinois north to Dakota and Manitoba. It winters as far south as Texas, and visits the Atlantic coast in its migrations.

Genus **CHONDESTES** Swainson, 1827.

Chondestes grammacus (Say). **Lark Sparrow.**

Fringilla grammaca SAY, Long's Exp., II, 1823, 139.

Chondestes grammaca BONAPARTE, Geog. & Comp. List, 1838, 32.

Popular synonyms: LARK FINCH. POTATO BIRD.

When Mr. E. W. Nelson wrote his *Birds of Northeastern Illinois* in 1876 he reported the Lark Sparrow as a common summer resident. It is now, however, a rare summer resident, arriving about the middle of April, and departing in September. Mr. J. Grafton Parker, Jr., informs me that he obtained a nest of this species which contained four eggs, in a pasture near Evanston, in June, 1880.

The range of the Lark Sparrow includes the Mississippi Valley region north to Manitoba, and from Michigan, Ohio and Ontario westward to the Plains. It breeds nearly throughout its range and winters as far south as eastern Texas.

*Twenty-second Annual Report, Dept. Geol. and Nat. Resources, Indiana, 1897, 948.

Genus **ZONOTRICHIA** Swainson. 1831.

Zonotrichia querula (Nuttall). **Harris' Sparrow.**

Fringilla querula NUTTALL, Man., I, ed. 2, 1840, 555.

Zonotrichia querula GAMBEL, Journ. Acad. Nat. Sci. Philadelphia, ser. 2, I, 1847, 51.

Popular synonyms: HARRIS'S FINCH. MOURNING FINCH.

Mr. E. W. Nelson reported (1876) Harris's Sparrow to be a very rare visitant to our vicinity. Mr. James O. Dunn says* that he took a specimen east of Riverdale, Illinois, which he observed in a growth of small willows. Mr. Ruthven Deane informs me that on May 11, 1904, he observed a male of this species feeding with a flock of sparrows in the south end of Lincoln Park.

The range of this Sparrow extends from the eastern border of the Great Plains eastward to Wisconsin, Illinois and Missouri, and from Manitoba southward to Texas in the winter. It is quite irregular in its appearance on the eastern border of its range.

Zonotrichia leucophrys (Forster). **White-crowned Sparrow.**

Emberiza leucophrys FORSTER, Philos. Trans., LXII, 1772, 426.

Fringilla leucophrys BONAPARTE, List, 1828, 32.

Zonotrichia leucophrys SWAINSON, in Sw. & Rich., Fauna Bor. Amer., II, 1831, 493.

The White-crowned Sparrow is a common migrant, the larger number passing northward in April and returning, on their fall migration, the latter part of September and the early part of October.

The range of this Sparrow includes nearly all of North America, and it breeds in the mountain ranges of the west and from Wisconsin and Vermont northward.

Zonotrichia albicollis (Gmelin). **White-throated Sparrow.**

Fringilla albicollis GMELIN, S. N., I, ii, 1788, 926.

Zonotrichia albicollis SWAINSON, Classif. B., II, 1837, 288.

Popular synonyms: PEABODY BIRD. YELLOW-BROWED SPARROW.

The White-throated Sparrow is an abundant migrant, and "a rare summer resident" (Nelson), passing northward in April and returning, on the fall migration, the latter part of September and in October.

The range of this species is chiefly east of the Great Plains. It breeds from the northern portion of the United States north-

*Ank., Vol. XII, 1895, 395.

ward, and it winters from Massachusetts southward on the Atlantic coast and in the Mississippi Valley from Missouri and Illinois southward.

Genus **SPIZELLA** Bonaparte, 1832.

Spizella monticola (Gmelin). **Tree Sparrow.**

Fringilla monticola GMELIN, S. N., I, ii, 1788, 912.

Fringilla canadensis LATH., Ind. Orn., I, 1790, 434.

Spizella monticola BAIRD, B. N. Amer., 1858, 472.

Zonotrichia canadensis "LATH." of some authors.

Popular synonyms: WINTER CHIPPY. CANADIAN SPARROW. WINTER SPARROW.

The Tree Sparrow is a common winter resident, arriving about the middle of October and departing near the middle of April.

The range of the Tree Sparrow includes North America east of the Plains, and from South Carolina, Kentucky and the Indian Territory north to the Arctic Ocean. It breeds north of the United States east of the Rocky Mountains, and winters from the northern border of the United States southward.

Spizella socialis (Wilson). **Chipping Sparrow.**

Fringilla socialis WILSON, Amer. Orn., II, 1810, 127, pl. 16, fig. 5.

Spizella socialis BONAPARTE, Geog. & Comp. List, 1838, 33.

Zonotrichia socialis GRAY, Hand-list, II, 1870, 94, 7397.

Popular synonyms: CHIPPY. CHIP-BIRD. HAIR-BIRD.

A common summer resident, arriving toward the middle of April and departing from the last of September to the middle of October.

The range of the Chipping Sparrow covers North America east of the Rocky Mountains and from Newfoundland and the Great Slave Lake southward to eastern Mexico. It breeds in Mexico and the Gulf States northward, and it winters in the southern portion of its range.

Spizella pallida (Swainson). **Clay-colored Sparrow.**

Emberiza pallida SWAINSON, in Sw. & Rich., Fauna Bor. Amer., II, 1831, 251.

Spizella pallida BONAPARTE, Geog. & Comp. List, 1838, 33.

The only record that I have found of the occurrence of this species within our limits is that of Mr. E. W. Nelson, who says: "A rare summer resident about the borders of prairies. Specimens are in Mr. Holden's collection taken near Chicago."

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 108.

The A. O. U. Check-list gives its range as follows: "Interior of North America, from Illinois and Iowa west to the Rocky Mountains, Arizona, and Cape St. Lucas, and from Guanajuato and Oaxaca north to the Saskatchewan Plains. Breeds from Iowa and Nebraska northward."

Spizella pusilla (Wilson). **Field Sparrow.**

Fringilla pusilla WILSON, Amer. Orn., II, 1810, 121, pl. 16, fig. 2.

Fringilla juncoformis NUTTALL, Man., I, 1832, 499.

Spizella pusilla BONAPARTE, Geog. & Comp. List, 1838, 33.

Popular synonyms: FIELD CHIPPY. FIELD CHIP-BIRD. RED-BILLED CHIPPY.

The Field Sparrow is a common summer resident, arriving early in April, and departing early in October.

Its range includes southern Canada and the United States east of the Plains and south to the Gulf of Mexico and Texas. It breeds from South Carolina, Kentucky and Kansas northward.

Genus **JUNCO** Wagler, 1831.

Junco hyemalis (Linnaeus). **Slate-colored Junco.**

Fringilla hyemalis LINNÆUS, S. N., ed. 10, I, 1758, 183.

Fringilla nivalis WILSON, Amer. Orn., III, 1810, 129, pl. 16, fig. 6.

Junco hyemalis SCL., P. Z. S., 1857, 7.

Popular synonyms: SNOWBIRD. COMMON SNOWBIRD. SLATE-COLORED SNOWBIRD. BLACK OR GRAY SNOWBIRD.

The Slate-colored Junco is an abundant migrant. It arrives the last of February and remains in our vicinity until May. In its fall migrations it arrives about the middle of September and departs on the appearance of severely cold weather. It is also claimed that a few of these Juncos remain within our limits during the more open winters.

The range of this species covers North America, chiefly east of the Rocky Mountains, and it breeds in the mountain regions of the northeastern portions of the United States northward and to Alaska. It winters in the more temperate portion of the eastern United States as far south as the Gulf of Mexico.

Junco montanus Ridgway. **Montana Junco.**

Junco oregonus COALE, Bull. Natt. Orn. Club., ii, p. 82, 1877.

Junco montanus RIDGWAY, Auk, XV, p. 321, Oct., 1898.

A. O. U. Committee, Auk, XVI, p. 119, 1899 (No. 567, 1).

A well-defined specimen of this species is in the collection of The Chicago Academy of Sciences, which was taken by Mr. F. S. Dayton, of Chicago. On October 21st, 1898, he saw, in the

woods west of North Evanston, a large flock of Juncos, in which there was an Arctic Towhee. He shot five of the birds, one of which proved to be *Junco montanus*, an identification which was later confirmed by Mr. Ridgway. Mr. Dayton says:

"The birds were feeding on the seeds of ragweed and I would have passed them by but for the fact that the darkest one flew to the dead limb of a sapling and was so strikingly different from our common Juncos that I shot the bird and also four others which showed a very dark plumage."

This species was recorded some thirty years ago by Mr. H. K. Coale (as *Junco oregonus*), who says:* "October 14, 1875, I saw a flock of some dozen birds in a willow tree and killed one of them with a sling; the rest flew off and were not seen again. The specimen was sent to Mr. Nelson, who identified it as *Junco oregonus*, the first one of this species captured in the state (Illinois), its extreme eastern range heretofore known being Kansas." Mr. Coale informs me that this specimen was taken in a yard in Chicago. *Junco montanus* would seem to be a rare winter visitant.

The range of this species is as follows: Breeding from north-western Montana and northern Idaho north to Northwest Territory and Alberta; in winter south to Arizona, northern Chihuahua, western and middle Texas, etc. East more or less casually to eastern Kansas, Illinois, Michigan, northern Indiana, Massachusetts, Maryland, etc.

***Junco oregonus shufeldti* (Coale). Shufeldt's Junco.**

Junco hyemalis shufeldti COALE, Auk, IV, p. 330, Oct., 1887.

Junco hyemalis shufeldti COALE, A. O. U. Check List, p. 235, 1895.

There is a specimen of this bird in the Field Museum of Natural History, which was taken at Waukegan, Illinois, February 26th, 1897. It is an adult male and very typical of *shufeldti*. The skin was purchased from Mr. Henry K. Coale, who described the variety.

The range of *shufeldti* is as follows: Breeding from the interior of northern British Columbia, east to the Rocky Mountains in Alberta, south to Vancouver Island, Washington and northern Oregon, probably to northwestern Montana and western Idaho; south in winter over entire Rocky Mountain plateau of the United States to Arizona, New Mexico and western Texas and even to northern Mexico; occasional in winter in northern (and eastern?)

*Bull. Nuttall Ornith. Club, Vol. 22, July, 1877.

California, straggling eastward to Illinois. This is the most eastern authentic range yet recorded. It is quite probable that both this variety and also *Junco montanus* may be found in some collections labeled *hymnalis* or *oreganus*. A lookout should be kept by local ornithologists for eastern stragglers of these two Juncos.

Genus **MELOSPIZA** Baird, 1858.

Melospiza cinerea melodia (Wilson). **Song Sparrow.**

Fringilla fasciata GMELIN, S. N., I, pt. ii, 1788, 922.

Fringilla melodia WILSON, Amer. Orn., II, 1810, 125, pl. 16, fig. 4.

Melospiza melodia BAIRD, Rep. Pacific R. R. Surv., IX, 1858, 477, part.

Melospiza fasciata SCOTT, Amer. Nat. X, 1876, 18.

Melospiza cinerea melodia RIDGWAY, Bull. U. S. Nat. Mus., No. 50, pt. 1, 1901, 354.

The Song Sparrow is a common summer resident, arriving early in March, and departing in October.

The range of the Song Sparrow includes the eastern United States from the Atlantic coast westward quite through the Great Plains, breeding along the Atlantic sea-board and the northern United States northward to the Fur Countries and wintering from the latitude of about 50° south to the Gulf of Mexico.

Melospiza lincolnii (Audubon). **Lincoln's Sparrow.**

Fringilla lincolnii AUDUBON, Orn. Biog., II, 1834, 539, pl. 193.

Melospiza lincolnii BAIRD, Rep. Pacific R. R. Surv., IX, 1858, 482.

Popular synonyms: LINCOLN'S FINCH. LINCOLN'S SONG SPARROW.

A rare summer resident and a not uncommon spring and fall migrant. Mr. George K. Cherrie obtained a young bird, just out of the nest, at Worth, Illinois, on June 30, 1896, and on July 16, 1896, Mr. Cherrie and Mr. J. Grafton Parker, Jr., obtained an adult and a nestling near Lake Calumet. These Sparrows arrive in May and depart from the last of September to the middle of October.

While the range of this species covers practically the whole of North America it breeds chiefly north of the United States and winters in the southern states, Mexico and south to Panama.

Melospiza georgiana (Latham). **Swamp Sparrow.**

Fringilla georgiana LATHAM, Ind. Orn., I, 1790, 460.

Fringilla palustris WILSON, Amer. Orn., III, 1811, 49, pl. 22, fig. 1.

Melospiza palustris BAIRD, Rep. Pacific R. R. Surv., IX, 1858, 483.

Melospiza georgiana RIDGWAY, Proc. U. S. Nat. Mus., VIII, 1885, 355.

Popular synonym: SWAMP SONG SPARROW.

A common summer resident, arriving late in March, and departing late in October.

The range of this Sparrow covers the eastern United States and British Possessions, west to the Great Plains, casually to Utah, and breeds from the United States northward. It winters southward chiefly below latitude 38° .

Genus **PASSERELLA** Swainson, 1837.

Passerella iliaca (Merrem). **Fox Sparrow.**

Fringilla iliaca MERREM, Beitr. Gesch. Vög., II, 1786-1787, 49, pl. 10.

Passerella iliaca SWAINSON, Classif. B., II, 1837, 288.

Popular synonyms: FOX-COLORED SPARROW. RUFOUS SPARROW.

The Fox Sparrow is a common migrant, passing through our area in spring migrations chiefly in March and April; returning in the fall it may remain with us until about the middle of November.

The range of the Fox Sparrow covers eastern North America from the Gulf of Mexico northward to Alaska and the Arctic coast, and it breeds north of the United States and winters chiefly south of latitude 40° .

Genus **PIPILO** Vieillot, 1816.

Pipilo erythrophthalmus (Linnaeus). **Towhee.**

Fringilla erythrophthalmus LINNAEUS, S. N., ed. 10, I, 1758, 180.

Pipilo erythrophthalmus VIEILLOT, Gal. Ois., I, 1824, 109, pl. 80.

Popular synonyms: JAREE. CHEWINK. TOWINK. GROUND ROBIN.

The Towhee is a common summer resident, arriving from the middle of March to the middle of April, and departing about the last of October.

The range of this species covers the eastern United States and the southern portion of the British Possessions, west to the Plains. It breeds from Georgia and the lower Mississippi Valley northward; winters from Pennsylvania and Indiana southward.

Pipilo maculatus arcticus (Swainson). **Arctic Towhee.**

Purgita (Pipilo) arctica SWAINSON, in Sw. & Rich., Fauna Bor. Amer., II, 1831, 260, pls. 51, 52.

Pipilo maculatus var. *arcticus* COUES, Key, 1872, 152.

The only record that I have found of the taking of the Arctic Towhee within our limits is that of Mr. F. S. Dayton who shot one of these birds in the woods west of North Evanston, Illinois, on October 24, 1898, near the same locality where he obtained

specimens of *Junco montanus* three days before. The specimen is in the collection of The Chicago Academy of Sciences having been donated by Mr. Dayton. It is the skin of a typical adult male.

Its range is given as follows in the A. O. U. Check-list: "Plains of the Platte, upper Missouri, Yellowstone and Saskatchewan Rivers, west to the eastern slope of the Rocky Mountains, south in winter to Kansas, Colorado and Texas."

Genus **CARDINALIS** Bonaparte, 1837.

Cardinalis cardinalis (Linnaeus). **Cardinal.**

Loxia cardinalis LINNÆUS, S. N., ed. 10, 1758, 172.

Cardinalis virginianus BONAPARTE, Proc. Zool. Soc. London, 1837, III, part.

Pitylus cardinalis AUDUBON, Synop., 1839, 131.

Cardinalis cardinalis LICHTENSTEIN, Nomencl. Mus. Berol., 1854, 44.

Popular synonyms: **CARDINAL GROSBEAK. REDBIRD. CARDINAL REDBIRD. VIRGINIAN REDBIRD. VIRGINIA NIGHTINGALE. CRESTED REDBIRD. CORN-CRAKER.**

In 1876, Mr. E. W. Nelson* reported the Cardinal to be "a rare and irregular summer resident," and says that "occasionally specimens remain until late in Autumn." I have heard of the Cardinal being taken in our public parks, and have myself secured one specimen which showed, however, unmistakable signs of having been an escaped cage bird. Mr. J. Grafton Parker, Jr., has a specimen of this species which was taken at Kouts, Indiana, on December 11, 1893. Some years ago I found a nest of the Cardinal at River Forest, Illinois. Mr. O. M. Schantz informs me that in the year 1904 there were two pairs nesting at Riverside, Illinois, and that they arrived in that locality on the seventeenth of April.

The range of the Cardinal covers the United States east of the Great Plains, and from Iowa, the Great Lakes and southern New York southward. Casually it is found further north in Ontario and the New England states.

Genus **ZAMELODIA** Cones, 1880.

Zamelodia ludoviciana (Linnaeus). **Rose-breasted Grosbeak.**

Loxia ludoviciana LINNÆUS, S. N., ed. 12, I, 1766, 306.

Fringilla ludoviciana BONAPARTE, Amer. Orn., II, 1828, 79, pl. 15, fig. 2.

Coccochorus ludovicianus AUDUBON, Syn., 1839, 133.

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 110

Hedymeles ludoviciana CABANIS, Mus. Hein., I, June, 1851, 152.

Goniaphea ludoviciana GUNDLACH, Report Fisco-Nat. Cuba, I, 1866, 286.

Zamelodia ludoviciana COUES, Bull. Nutt. Orn. Club, V, 1880, 98.

Habia ludoviciana STEJNEGER, Auk, I, Oct. 1884, 367.

Popular synonyms: RED-BREASTED GROSBEEK. POTATO-BUG BIRD.

The Rose-breasted Grosbeak is a common summer resident, arriving the last of April, and departing early in October.

The range of the Rose-breasted Grosbeak extends east of Manitoba and the Great Plains, southward in winter to Cuba and the northern portion of South America. It breeds from about the latitude of Kansas and South Carolina northward.

Genus **CYANOSPIZA** Baird, 1858.

Cyanospiza cyanea (Linnæus). **Indigo Bunting**.

Tanagra cyanea LINNÆUS, S. N., ed. 12, I, 1766, 315.

Fringilla cyanea WILSON, Amer. Orn., I, 1810, 100, pl. 6, fig. 5.

Passerina cyanea VIELLOT, Nouv. Dict. d'Hist. Nat., XXV, 1817, 7.

Spiza cyanea JARDINE, ed. Wilson's Amer. Orn., III, 1832, 446.

Cyanospiza cyanea BAIRD, Rep. Pacific R. R. Surv., IX, 1858, 505.

Popular synonyms: INDIGO BIRD. BLUE LINNET. GREEN BIRD OR LINNET.

The Indigo Bunting is a common summer resident, arriving the last of April, and departing the last of September.

The range of this species covers the eastern United States, from Canada southward, in winter to Central America and Cuba, westward to the eastern edge of the Great Plains.

Genus **SPIZA** Bonaparte, 1824.

Spiza americana (Gmelin). **Dickcissel**.

Emberiza americana GMELIN, S. N., I, ii, 1788, 872.

Euspiza americana BONAPARTE, Geog. and Comp. List, 1838, 32.

Spiza americana RIDGWAY, Proc. U. S. Nat. Mus., III, March 27, 1880, 3.

Popular synonyms: BLACK-THROATED BUNTING. LITTLE MEADOW-LARK.

A common summer resident, arriving early in May and departing about the latter part of August.

The range of the Dickcissel includes the United States east of the Rocky Mountains, from Massachusetts, Ontario and North Dakota south to Texas. It winters in Central America and northern South America and is rare east of the Alleghanies.

FAMILY TANAGRIDÆ: THE TANAGERS.

Genus **PIRANGA** Vieillot, 1807.**Piranga erythromelas** Vieillot. **Scarlet Tanager.***Tanagra rubra* (not *Fringilla rubra* Linnaeus, 1758) LINNÆUS, S. N., ed. 12, I, 1766, 314.*Pyrranga rubra* SWAINSON AND RICHARDSON, Fauna Bor. Amer., II, 1831, 273.*Pyrranga erythromelas* VIEILLOT, Nouv. Dict. d'Hist. Nat., XXVIII, 1819, 293.Popular synonym: **BLACK-WINGED REDBIRD.**

The Scarlet Tanager is a common summer resident, arriving the last of April and departing the last of September.

The range of this species lies east of the Great Plains, and from Manitoba and southern Ontario southward, in winter to the eastern portion of Mexico, Central America, northern South America and the West Indies. It breeds chiefly in the more northern portion of its range.

Piranga rubra (Linnaeus). **Summer Tanager.***Fringilla rubra* LINNÆUS, S. N., ed. 10, I, 1758, 181.*Tanagra aestiva* GMELIN, S. N., I, 1788, 889.*Pyrranga aestiva* VIEILLOT, Nouv. Dict. d'Hist. Nat., ed. 2, XXVIII, 1819, 291.*Piranga rubra* VIEILLOT, Ois. Amer. Sept., I, 1807, p. iv.Popular synonyms: **SUMMER REDBIRD. VERMILION TANAGER. RED TANAGER. RED BEE-BIRD.**

The summer Tanager is, at the present time at least, a very rare summer visitant. Mr. Robert Kennicott says that it was not rare at the time he wrote his list of Cook County birds.* He also states that the species was known to nest in Cook County. Mr. E. W. Nelson says:† "A rare summer visitant. I know of but few instances of its occurrence." Mr. O. M. Schantz of Morton Park, Illinois, informs me that a Summer Tanager has made an extended visit to his grounds, and that it has been seen by a number of persons who were familiar with the bird, so that there seems to be no question of its occurrence occasionally within our limits. Mr. Schantz saw this Tanager in April, 1904.

The Summer Tanager is, at the present time at least, a very range which extends throughout the eastern United States west to the Plains, and from southern New Jersey and southern Illinois southward, wintering in eastern Mexico and southward to

*Trans. Illinois State Agri. Society, Vol. I, 1853-1854, 585.

†Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 1876, 104.

Peru. It is casually found northward to southern Canada and Nova Scotia.

FAMILY HIRUNDINIDÆ: SWALLOWS.

Genus **PROGNE** Boie, 1826.

Progne subis (Linnaeus). **Purple Martin.**

Hirundo subis LINNÆUS, S. N., ed. 10, 1, 1758, 192.

Hirundo purpurea LINNÆUS, S. N., ed. 12, 1, 1766, 344.

Progne purpurea BOIE, Isis, 1826, 971.

Progne subis BAIRD, Rev. Amer. B., 1, May, 1865, 274.

Popular synonyms: MARTIN. HOUSE MARTIN. PURPLE SWALLOW.
AMERICAN MARTIN. VIOLET SWALLOW.

The Purple Martin is a common summer resident, arriving from the last of March to the middle of April and departing in September.

The range of the Purple Martin extends over the whole of temperate North America and it winters in South America.

Genus **PETROCHELIDON** Cabanis, 1850.

Petrochelidon lunifrons (Say). **Cliff Swallow.**

Hirundo lunifrons SAY, Long's Exp., 11, 1823, 47.

Hirundo fulva BONAPARTE, Amer. Orn., 1, 1825, 63, pl. 7, fig. 1.

Petrochelidon lunifrons CASSIN, Cat. Hirun. Mus. Philadelphia Acad. Nat. Sci., 1853, 4.

Popular synonyms: LEAVE SWALLOW. REPUBLICAN SWALLOW. SQUARE-TAILED SWALLOW. WHITE-FRONTED SWALLOW. CRESCENT SWALLOW.

The Cliff Swallow is a common summer resident, arriving early in April and departing in September.

The range of this Swallow covers the whole of temperate North America from Nova Scotia and Alaska southward, breeding south as far as southern California, southern Texas and the Gulf of Mexico, though it is seemingly not found in Florida. It winters in Central and South America.

Genus **HIRUNDO** Linnaeus, 1758.

Hirundo erythrogastra Boddaert. **American Barn Swallow.**

Hirundo erythrogastra BODDAERT, Tabl. P. E., 1783, 45.

Hirundo horreorum BARTON, Frag. Nat. Hist. Penn., 1799, 17.

Hirundo americana WILSON, Amer. Orn., V, 1812, 31, pl. 38, figs. 1, 2.

Chelidon erythrogastra STEANEGER, Proc. U. S. Nat. Mus., V, June 5, 1882, 31.

Popular synonyms: RUFOUS-BELLIED SWALLOW. FORKED-TAILED BARN SWALLOW.

The American Barn Swallow is a common summer resident, arriving the last of April and the first of May and departing early in September.

The range of the American Barn Swallow covers North America in general, and it breeds from the Fur Countries southward to Mexico. It winters in the southern states and tropical America as far south as southern Brazil.

Genus **IRIDOPROCNE** Coues, 1878.

Iridoprocne bicolor (Vieillot). **Tree Swallow.**

Hirundo bicolor VIEILLIOT, Ois. Amer. Sept., I, 1807, 61, pl. 31.

Tachycineta bicolor CABANIS, Mus. Hein., I, 1850, 48.

Iridoprocne bicolor COUES, Birds Colorado Valley, 1878, 412.

Popular synonyms: WHITE-BELLIED SWALLOW. BLACK AND WHITE SWALLOW. GREEN-BLUE SWALLOW.

Many years ago the Tree Swallow was reported to be an abundant resident, but now it is certainly a rather rare resident but a common migrant, arriving from the last of March to the middle of April and departing in September.

The range of the Tree Swallow covers the whole of temperate North America and it breeds from the table-lands of Mexico northward to the Fur Countries. It winters in the West Indies, the southern United States and southward through Mexico and Guatemala.

Genus **TACHYCNETA** Cabanis, 1850.

Tachycineta thalassina lepida (Mearns). **Violet-green Swallow.**

Hirundo thalassinus of authors, not of SWAINS., Phil. Mag., I, 1827, 336.

Tachycineta thalassina COUES, Birds, N. W., 1874, p. 86 (part).

Tachycineta lepida MEARNs, Proc. Biol. Soc. Wash., XV, March 5, 1892, p. 31.

Tachycineta thalassina lepida, A. O. U. Com., Auk, XIX, July, 1902, p. 325.

This bird is a distinctly western species, ranging from the eastern base of the Rocky Mountains westward to the Pacific Ocean, and from British Columbia southward, wintering as far south as Costa Rica. A fine male specimen of this Swallow was taken, by Mr. George Clingman, within our limits at South Kenwood, on May 4, 1897.

Genus **RIPARIA** Forster, 1817.

Riparia riparia (Linnæus). **Bank Swallow.**

Hirundo riparia LINNÆUS, S. N., ed. 10, I, 1758, 192.

Cotyle riparia BOIE, Isis, 1826, 971.

Clivicola riparia STEJNEGER Proc. U. S. Nat. Mus., V, 1882, 32.

Riparia riparia SHARPE & WYATT, Monogr. Hirundinidae, 1894, XLIV,
Popular synonyms: SAND MARTIN. SAND SWALLOW.

A common summer resident, arriving early in May and departing in September. This Swallow nests in the sand hills and clay bluffs along the lake shore.

The range of this Swallow includes the northern hemisphere in general and in the Americas south to the northern portion of South America. It winters chiefly south of the United States and breeds from the middle districts of the United States northward.

Genus **STELGIDOPTERYX** Baird, 1858.

Stelgidopteryx serripennis (Audubon). Rough-winged Swallow.

Hirundo serripennis AUDUBON, Orn. Biog., IV, 1838, 593.

Stelgidopteryx serripennis BAIRD, Rep. Pacific R. R. Surv., IX, 1858, 312.

Popular synonyms: ROUGH-WINGED BANK SWALLOW OR SAND MARTIN. BRIDGE SWALLOW.

A rare spring migrant. On the twenty-ninth of April, 1879, Mr. H. K. Coale shot four specimens at Dolton, Illinois. On the fifteenth of May, 1895, I obtained three adults of this species at Worth, Illinois. They were flying in company with Barn and Bank Swallows over the marshes. Mr. E. W. Nelson says: "A rare summer visitant, perhaps breeds."

The range of this species covers the whole of the United States, excepting possibly the extreme northern portion. It is also found in southern Ontario but not in the eastern portion of New England. It breeds throughout its range in the United States and into Mexico. It winters in the southern United States, Mexico and southward through Central America.

FAMILY AMPELIDÆ: WAXWINGS, ETC.

Genus **AMPELIS** Linnæus, 1766.

Ampelis garrulus Linnæus. Bohemian Waxwing.

Lanius garrulus LINNÆUS, S. N., ed. 10, I, 1758, 95.

Ampelis garrulus LINNÆUS, S. N., ed. 12, I, 1766, 297.

Bombycilla garrula BONAPARTE, Zool. Journ., 111, 1828, pl. 16, fig. 2.

VIEILLLOT, Nouv. Dict. d'Hist. Nat., XVI, 1817, 523, pl. 10, fig. 3.

Popular synonyms: NORTHERN WAXWING. BLACK-THROATED WAXWING. WAXEN CHATTERER.

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 102.

The Bohemian Waxwing is an irregular winter visitant. I have not taken this species within our area. On January 1, 1896, I obtained a fine pair at Lake Forest, Illinois, and saw about twenty more. A few days later, Mr. John F. Perry obtained a fine male at the same place. Mr. E. W. Nelson says: "An irregular but occasionally abundant winter resident, especially along the lake. In a letter dated March 16, 1876, Mr. Charles Douglas, of Waukegan, describes an 'immense' flock of these birds which he observed the day previous, upon the lake shore near that town." In his *Birds of Indiana*,† Mr. Amos W. Butler says: "Dr. J. L. Hancock informs me that March 1, 1880, he shot two from a flock of eight that were feeding on mountain ash berries in Chicago. March 30, 1880, over one hundred of these birds were killed at Whiting, Lake County, Indiana, and taken to a Chicago taxidermist. They were seen by Mr. H. K. Coale. Specimens from that lot are in the collection of Mr. Coale, Mr. George L. Toppan and my own." Mr. H. K. Coale informs me that on December 4, 1880, Mr. R. A. Turtle shot thirty of forty specimens, out of a large flock, at Whiting, Indiana.

The range of this species includes the northern parts of the northern hemisphere; in America, south in winter irregularly to Pennsylvania, Indiana, Illinois, Kansas, Colorado, Arizona and California. It breeds north of the United States.

***Ampelis cedrorum* (Vieillot). Cedar Waxwing.**

Bombycilla cedrorum VIEILLOT, Ois. Amer. Sept., I, 1807, 88, pl. 57.

Ampelis cedrorum GRAY, Gen. B., I, 1846, 278.

Popular synonyms: CEDAR BIRD. CEDAR-LARK. CHERRY BIRD. CAROLINA WAXWING.

The Cedar Waxwing is a common summer resident which occasionally stays within our limits during the winter. The majority of them arrive the last of March and depart the last of September.

The range of the Cedar Waxwing includes the whole of temperate North America southward, breeding as far south as the southern states. It winters from the northern border of the United States southward as far as the West Indies and Costa Rica.

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 103.

†Twenty-second Annual Report, Dept. Geol. and Nat. Resources, Indiana, 1897, 1002.

FAMILY LANIIDÆ: SHRIKES.

Genus **LANIUS** Linnæus. 1758.**Lanius borealis** Vieillot. **Northern Shrike.***Lanius borealis* VIEILLOT, Ois. Amer. Sept., I, 1807, 80, pl. 50.*Collurio borealis* BAIRD, Review Amer. Birds, June, 1866, 440.

Popular synonyms: GREAT AMERICAN SHRIKE. GREAT NORTHERN SHRIKE. GREAT NORTHERN BUTCHER BIRD.

The Northern Shrike is a common winter resident, arriving the last of October and departing late in March. Mr. E. W. Nelson suggests that "sometimes they remain late in the season and may breed."* Probably the most advantageous places to observe these birds are in the city parks, where they fare sumptuously on the English sparrows. I have repeatedly seen them drive the sparrows from under the eaves of the buffalo pens in Lincoln Park, Chicago, in order to capture them.

The range of this species includes northern North America, in winter south to about latitude 35°, and on the Pacific coast to northern California. It breeds north of the United States.

Lanius ludovicianus Linnæus. **Loggerhead Shrike.***Lanius ludovicianus* LINNÆUS, S. N., ed. 12, I, 1766, 131.*Lanius ludovicianus* var. *ludovicianus* LINNÆUS, of some authors.

Popular synonyms: COMMON AMERICAN SHRIKE. LOUISIANA SHRIKE. SOUTHERN BUTCHER BIRD.

The Loggerhead Shrike is a common summer resident, arriving early in March and departing the first of November.

The range of the Loggerhead Shrike covers the United States east of the Great Plains, and it breeds from the Gulf of Mexico northward excepting on the Atlantic coast where it breeds north to Virginia and casually to the southern portion of New Jersey. It also breeds through western Pennsylvania and New York to the New England states.

FAMILY VIRIONIDÆ: THE VIREOS.

Genus **VIREOSYLVA** Bonaparte, 1838.**Vireosylva olivacea** (Linnaeus). **Red-eyed Vireo.***Muscicapa olivacea* LINNÆUS, S. N., ed. 12, I, 1766, 327.*Vireo olivaceus* BONAPARTE, Ann. Lyc. N. Y., 11, 1826, 71.

Popular synonym: RED-EYED GREENLET.

The Red-eyed Vireo is a common summer resident, arriving early in May and departing early in October.

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 104.

The range of the Red-eyed Vireo lies chiefly east of Colorado and British Columbia, and from the Arctic regions southward. It breeds nearly throughout its North American range and winters south to Florida.

Vireosylva philadelphia Cassin. **Philadelphia Vireo.**

Vireosylva philadelphia CASSIN, Proc. Acad. Nat. Sci. Philadelphia, V, Feb. 1851, 153, pl. 10, fig. 2.

Virco philadelphicus BAIRD, Rep. Pacific R. R. Surv., IX, 1858, 335.

Popular synonyms: PHILADELPHIA GREENLET. BROTHERLY-LOVE VIREO.

This Vireo is a rare migrant, arriving in the spring about the middle of May, and returning in the fall from the last of August to the last of September. In 1876, Mr. E. W. Nelson* considered it to be a common migrant, and says: "They were so numerous near Waukegan about the twentieth of May, 1876, that a dozen specimens might have been obtained in an hour."

The range of this species lies in the eastern United States, chiefly west of the Alleghanies, and from the Fur Countries southward to Costa Rica and Panama though it has not been recorded from Mexico or the West Indies. It breeds chiefly north of the United States. There are indications that it may breed in the vicinity of Chicago. Mr. E. W. Nelson says: "The first of July, 1874, I found two pairs of these birds in a dense willow thicket bordering Mazon Creek, about sixty miles south of Chicago. Upon my approach the birds showed great anxiety, uttering a short complaining cry, and coming within a few feet of me. That they had young in the vicinity I was sure, but owing to the character of the covert they were not found." There is evidence that it also breeds in Indiana, for it is known to be a rare summer resident in that state, specimens having been taken during the months of June and July. Professor B. W. Evermann says that it is a rare summer resident in both Carroll and Monroe Counties, Indiana.

Vireosylva gilva (Vieillot.). **Warbling Vireo.**

Muscicapa gilva VIEILLOT, Ois. Amer. Sept., I, 1807, 65, pl. 34.

Virco gilvus BONAPARTE, Journ. Acad. Nat. Sci. Philadelphia, IV, 1824, 176.

Popular synonym: WABBLING GREENLET.

The Warbling Vireo was formerly a common, but it is now a rare summer resident, and is more common during its migrations. It arrives early in May and departs about the middle of

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 102.

September. On June 9, 1885, Mr. B. T. Gault found a nest of this species, which contained four eggs, in Lake County, Illinois, a few miles north of our area.

The range of the Warbling Vireo covers North America in general, from the Fur Countries southward into Mexico and it breeds quite throughout its range.

Genus **LANIVIREO** Baird, 1858.

Lanivireo flavifrons (Vieillot). **Yellow-throated Vireo.**

Virco flavifrons VIEILLOT, Ois. Amer. Sept., I. 1807, 85, pl. 54.

Popular synonym: **YELLOW-THROATED GREENLET.**

This Vireo is a not uncommon migrant, and is probably a rare summer resident. In the spring it arrives about the last of April, and in the fall it arrives in September and departs from the last of that month to the middle of October. On the eighth of June, 1885, Mr. B. T. Gault obtained a nest and the eggs of this species in Lake County, Illinois, a few miles north of our area.

The range of this Vireo covers the United States east of the Great Plains, and from Canada southward. It breeds from the Gulf of Mexico northward, and it winters in Florida and southward through Mexico to Colombia.

Lanivireo solitarius (Wilson). **Blue-headed Vireo.**

Muscicapa solitaria WILSON, Amer. Orn., II, 1810, 43, pl. 17, fig. 6.

Virco solitarius VIEILLOT, Nouv. Dict. d'Hist. Nat., XXXVI, 1819, 103.

Popular synonyms: **SOLITARY GREENLET OR VIREO. BLUE-HEADED GREENLET.**

The Blue-headed Vireo was formerly a common but now it is a rather rare migrant. In the spring it arrives from the first to the last of May, and it returns in the fall from the middle of September to the first week in October. Mr. B. T. Gault informs me that it is silent while passing through our area during its migrations, and that it occurs more plentifully during its fall migrations.

Its range covers North America east of the Plains and from the Fur Countries southward. It breeds from the northern border of the United States northward, and it winters in the West Indies and eastern Mexico south to Guatemala.

Genus **VIREO** Vieillot, 1807.

Vireo noveboracensis (Gmelin). **White-eyed Vireo.**

Muscicapa noveboracensis GMELIN, S. N., I. ii, 1788, 947.

Vireo noveboracensis BONAPARTE, Journ. Acad. Nat. Sci. Philadelphia, IV, 1824, 176.

Popular synonyms: WHITE-EYED GREENLET. LITTLE GREEN HANGING-BIRD. CHICKTY-BEATER.

The White-eyed Vireo is a rare visitant from other portions of Illinois. Mr. B. T. Gault informs me of a specimen which was taken at Glen Ellyn on May 24, 1898. This species is an abundant summer resident in the southern portions of Illinois, and is also not uncommon in other suitable localities within the state. Mr. E. W. Nelson recorded it* as a "summer resident. Rather rare. Arrives the middle of May and departs the first of October."

The range of the White-eyed Vireo covers the United States, east of the Rocky Mountains and from Minnesota and the southern portion of New England. It breeds from the Gulf states northward, and winters in the Gulf states and south to Guatemala and Honduras.

Vireo bellii Audubon. **Bell's Vireo.**

Vireo bellii AUDUBON, B. Amer., VII, 1844, 333, pl. 485.

Popular synonym: BELL'S GREENLET.

The only records I have been able to find of the occurrence of Bell's Vireo within our limits are the following: Mr. E. W. Nelson says:* "A single specimen, obtained near Chicago, June 23, 1875, is the only instance I have recorded of its occurrence in this vicinity. It is a common summer resident on the more southern prairies of the state." Mr. H. K. Coale informs me that a specimen was brought to him which had been shot by a boy in Chicago in the spring of 1875. The identification was afterwards confirmed by Dr. Ridgway. Mr. Harry Swarth reports the finding of Vell's Vireo, nesting in a thick patch of shrubbery at Joliet, Illinois. Subsequently several more nests were found. These are the first authentic nesting records for this region.

FAMILY MNIOTILTIDÆ: WOOD WARBLERS.

Genus **MNIOTILTA** Vieillot, 1816.

Mniotilta varia (Linnaeus). **Black and White Warbler.**

Motacilla varia LINNÆUS, S. N., ed. 12, I, 1766, 333.

Mniotilta varia VIEILLOT, Nouv. Dict. d'Hist. Nat., XXI, 1818, 230.

Popular synonyms: BLACK AND WHITE CREEPER. BLACK AND WHITE CREEPING WARBLER. STRIPED CREEPER.

*Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, 1876, 103.

This Warbler is a common migrant, arriving from early in April to the middle of May, and returning in the fall from about the middle of August to the first of October. In 1876, Mr. E. W. Nelson reported this creeping Warbler to be a not uncommon summer resident, but I can find no other records of its occurrence within our limits during the summer months.

The range of this species extends over eastern North America, east of the eastern base of the Rocky Mountains and from the Fur Countries southward, in winter, through the West Indies and Central America to Colombia. It breeds from the southern states northward.

Genus **PROTONOTARIA** Baird, 1858.

Protonotaria citrea (Boddaert). **Prothonotary Warbler.**

Motacilla citrea BODDAERT, Tabl. P. E., 1783, 44.

Motacilla protonotarius GMELIN, S. N., I, 1788, 972.

Sylvia protonotaria VIEILLOT, Nouv. Dict. d'Hist. Nat., XI, 1817, 211.

Motacilla auricollis GMELIN, S. N., I, 1788, 984.

Sylvicola auricollis NUTTALL, Man., ed. 2, I, 1840, 431.

Protonotaria citrea BAIRD, Rep. Pacific R. R. Surv., 1858, 239.

Popular synonyms: **WILLOW WARBLER.** **GOLDEN SWAMP WARBLER.**

The Prothonotary Warbler is a rare summer visitant. It breeds abundantly along the Kankakee River which seems to be the northern limit of its breeding range in Illinois. Occasionally these Warblers are seen within our limits. Mr. E. W. Nelson says: "Two specimens were taken during the summer of 1875, and I have heard of several other instances of its occurrence. All specimens taken in this vicinity have remarkably dull colored plumage." Mr. H. K. Coale reports it as having been seen or taken in Cook County in May, 1883. Miss Amalie Hammig, who is familiar with this species, writes me that she observed a brightly colored male at Riverside, Illinois, on June 2, 1897. Mr. B. T. Gault noticed one at Glen Ellyn, Illinois, on May 13, 1893. Mr. O. M. Schantz informs me that he saw a pair of these Warblers at Morton Park on May 15, 1904. During the year 1904 the Prothonotary Warbler was also seen in Lincoln Park, Chicago. It is my belief that this beautiful bird if encouraged and protected may eventually become more common within our limits and may possibly nest here.

While this species is more abundant in the Mississippi Valley, where it breeds abundantly, its range extends from Cuba and South America, in winter, northward to Pennsylvania, Michigan, Illinois, Iowa and Nebraska. Casually it is found further north in New England, Ontario and Minnesota.

Genus **HELMINTHOPHILA** Ridgway, 1882.**Helminthophila pinus** (Linnæus). Blue-winged Warbler.*Certhia pinus* LINNÆUS, S. N., ed. 12, I, 1766, 187.*Helminthophaga pinus* BAIRD, Rep. Pacific R. R. Surv., IX, 1858, 254.*Helminthophila pinus* RIDGWAY, Bull. Nutt. Orn. Club, VII 1882, 53.

Popular synonyms: BLUE-WINGED YELLOW WARBLER. BLUE-WINGED SWAMP WARBLER.

The Blue-winged Warbler is a rare migrant. There are but few known instances of its occurrence within our limits. These are all recent and are as follows: Mr. B. T. Gault observed it in DuPage County, Illinois, on August 18, 1894; on September 1, 1894, and on June 6, 1895. The last observation was that of a male in song and the bird seemed to have settled for the season in the Addison woods. However, Mr. Gault again visited the Addison woods on June 22, but it was evidently too late for he did not find the bird. On May 30, 1900, while at Palos Park, on the Wabash railway, he heard the notes of this Warbler in a bushy field, in a somewhat elevated situation, but did not see the bird. Mr. Eliot Blackwelder observed it in Morgan Park on May 24, 1895. This species was observed in June, 1906, by Mr. John F. Ferry, but the nest could not be located. As this species is known to breed in the southern part of Illinois, and as a juvenile bird has been taken by Mr. Gault in DuPage County, it does not seem impossible that a very few individuals may remain and breed within our limits.

The range of this Warbler covers the United States, east of the Great Plains and from Massachusetts, southern Michigan and southern Minnesota southward. It breeds quite throughout its United States range and winters from Mexico southward to Guatemala and Nicaragua.

Helminthophila chrysoptera (Linnæus). Golden-winged Warbler.*Motacilla chrysoptera* LINNÆUS, S. N., ed. 12, I, 1766, 333.*Sylvia chrysoptera* LATHAM, Ind. Orn., II, 1790, 541.*Helminthophaga chrysoptera* CABANIS, Mus. Hein., I, 1850, 20.*Helminthophila chrysoptera* RIDGWAY, Bull. Nutt. Orn. Club, VII, January, 1882, 53.

Popular synonyms: BLUE GOLDEN-WINGED WARBLER. GOLDEN-WINGED SWAMP WARBLER.

This Warbler is not an uncommon migrant which may be looked for from the first to the last of May, and from the last of August to the last of September. Regarding the occurrence

of this species within our limits, Mr. E. W. Nelson says:* "Comparatively rare. It breeds rarely."

The range of the Golden-winged Warbler lies chiefly in the eastern United States during the summer months, breeding from northern New Jersey and northern Indiana to southern Ontario, and also in the Alleghanies southward to South Carolina. It winters southward through Central America to the northern portion of South America.

Helminthophila rubricapilla (Wilson). Nashville Warbler.

Sylvia rubicapilla (not of Latham, 1790) WILSON, Amer. Orn., III, 1811, 120, pl. 27, fig. 3.

Sylvia rubricapilla WILSON, Amer. Orn., VI, 1812, 15.

Helminthophaga rubicapilla BAIRD, Rep. Pacific R. R. Surv., IX, 1858, 256.

Helminthophila rubicapilla FAXON, Auk, XIII, July, 1896, 261.

The Nashville Warbler is a rare migrant at the present time. Mr. E. W. Nelson reported it in 1876 to be a rare summer resident and very common during its migrations.† In its spring migrations it arrives within our limits from the first to the fifteenth of May, and it returns in the fall during the month of September. Mr. Robert Kennicott states in his list of Cook County birds‡ that the Nashville Warbler is "common during the latter part of April and throughout the month of May." In his Ornithology of Illinois, Mr. Robert Ridgway says that it "breeds in the extreme northern counties of the state."

The range of the Nashville Warbler covers North America east of the Great Plains and from the Fur Countries southward, in winter, to Mexico and Central America. It breeds from northern Illinois and Connecticut northward.

Helminthophila celata (Say). Orange-crowned Warbler.

Sylvia celata SAY, Long's Exp., 1, 1823, 169.

Vermivora celata NUTTALL, Man., ed. 2, 1840, 463.

Helminthophaga celata BAIRD, Rep. Pacific R. R. Surv., IX, 1858, 257, part.

Helminthophila celata RIDGWAY, Bull. Nutt. Orn. Club, VII, Jan. 1882, 54.

Formerly the Orange-crowned Warbler was a common, but at the present time it is a rare migrant within our limits. In the spring it arrives from the last of April to the last of May; in the fall it returns during the month of September. In 1876 Mr. E.

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 98.

†Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 98.

‡Trans. Illinois State Agri. Society, Vol. 1, 1853-1854, 583.

W. Nelson recorded it as a common migrant.* I have the following recent records of the taking of this species: On May 29, 1885, I obtained a specimen in Hyde Park, Chicago; September 10, 1888, and August 28, 1895, Mr. B. T. Gault obtained specimens in Chicago; May 1, 1896, and on October 1, 1896, Mr. Gault also obtained specimens in Du Page County, Illinois; on April 29, 1893, Mr. F. S. Dayton obtained a specimen at Bowmanville, Illinois. In his Birds of Indiana,† Mr. Amos W. Butler has published the following records for our area: "In 1871, Mr. C. E. Aiken informs me, it was not rare in Lake County, Indiana. In that county, also, Mr. H. K. Coale obtained a specimen, May 16, 1877, and two days later one in Cook County, Illinois, not far away. The next record I have from Cook County is of a specimen taken by Mr. C. A. Tallman, May 15, 1897."

The range of this species extends through eastern North America from Mexico northward. It breeds as far north as the Yukon and Mackenzie River districts and southward through the Rocky Mountains. It is rare north of Virginia and east of the Alleghany Mountains. It migrates southward, in winter, chiefly through the Mississippi Valley and westward to the Great Basin, and winters in the southern states and Mexico.

Helminthophila peregrina (Wilson). Tennessee Warbler.

Sylvia peregrina WILSON, Amer. Orn., III, 1811, 83, pl. 25, fig. 2.

Vermivora peregrina NUTTALL, Man., ed. 2, I, 1840, 469.

Helminthophaga peregrina CABANIS, Mus. Hein., I, 1850, 20.

Helminthophila peregrina RIDGWAY, Bull. Nutt. Orn. Club, VII, Jan. 1882, 54.

The Tennessee Warbler is a common migrant, the majority arriving within our limits in the month of May, and returning in the fall from the middle of August to the middle of October.

The range of this Warbler extends through the United States, east of the Rocky Mountains and it breeds from the northern border of the United States northward to the Arctic regions. It winters southward through eastern Mexico to the northern part of South America.

Genus **COMPSOTHTYPIS** Cabanis, 1850.

Compsotthypis americana ramalinæ (Ridg.). Western Parula Warbler.

Sylvia americana AUDUBON, Orn. Biog., I, 1882, 78, part.

Parula americana COUES, Key N. Amer. Birds, 1872, 93, part.

Parula americana NELSON, Bull. Essex Inst., VIII, 1876, 98.

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 98.

†Twenty-second Annual Report, Dept. Geol. and Nat. Resources, 1897, 1035.

Compsothlypis americana RIDGWAY, Orn. Ill., I, 1889, 131.

Compsothlypis americana ramalina RIDGWAY, Bull. U. S. Nat. Mus., No. 50, part ii, 1902, 486.

Popular synonym: BLUE YELLOW-BACKED WARBLER.

The Western Parula Warbler is a common migrant, arriving within our limits in the spring from about the fifth to the last of May, and returning in the fall from the last of August to the last of September.

The range of the Western Parula Warbler covers the Mississippi Valley and district of the Upper Great Lakes; breeding from Louisiana and Texas to Michigan, Wisconsin and Minnesota; occasional west to eastern Colorado; in winter southward through eastern Mexico and Central America to Nicaragua.

Genus **DENDROICA** Gray, 1842.

Dendroica tigrina (Gmelin). **Cape May Warbler.**

Motacilla tigrina GMELIN, S. N., I, ii, 1788, 985.

Sylvia maritima WILSON, Amer. Orn., VI, 1812, 99, pl. 54, fig. 3.

Sylvicola maritima JARDINE, ed. Wilson's Amer. Orn., II, 1832, 291.

Dendroica tigrina BAIRD, Rep. Pacific R. R. Surv., IX, 1858, 286.

Perissoglossa tigrina BAIRD, Review, Amer. Birds, April, 1865, 181.

The Cape May Warbler is a rather common migrant, but it so closely resembles *Dendroica maculosa* that it is frequently mistaken for that warbler. It arrives in the spring from the first to the twenty-fifth of May, and returns in the fall from the last of August to the last of September.

The range of this species covers North America east of the Great Plains and from the Hudson Bay region and Lake Winnipeg southward. It breeds chiefly north of the United States, and winters in the West Indies.

Dendroica æstiva (Gmelin). **Yellow Warbler.**

Sylvia æstiva LATHAM, Ind. Orn., II, 1790, 551.

Motacilla æstiva GMELIN, S. N., I, ii, 1788, 996.

Sylvicola æstiva SW. & RICH., Fauna Bor. Amer., II, 1831, 211.

Dendroica æstiva BAIRD, Rep. Pacific R. R. Surv., IX, 1858, 282.

Popular synonyms: SUMMER YELLOW-BIRD. WILD CANARY.

The Yellow Warbler is a very common summer resident, arriving the last of April, and departing about the first week in September.

The range of this species covers nearly the whole of North America. It breeds quite throughout its range in North America, and winters southward to Central and South America.

Dendroica cærulescens (Gmelin). **Black-throated Blue Warbler.**

Motacilla cærulescens GMELIN, S. N., I, 1788, 960.

Sylvia canadensis WILSON, Amer. Orn., II, 1810, 115, pl. 15, fig. 7.

Sylvicola canadensis RICHARDSON, Rep. Brit. Assoc. for 1836, 172.

Dendroica cærulescens BAIRD, Review Amer. Birds, April, 1865, 186.

Popular synonyms: CANADIAN WABLER. PINE SWAMP WARBLER.

This Warbler is a common migrant, arriving in the spring during the month of May, and returning in the fall from the last of August to the earlier days of October.

The range of this species covers North America, east of the Great Plains. It breeds chiefly north of the United States, but also in the Alleghany Mountains south to northern Georgia. It winters southward to the West Indies and Guatemala.

Dendroica coronata (Linnaeus). **Myrtle Warbler.**

Motacilla coronata LINNÆUS, S. N., ed. 12, I, 1766, 333.

Sylvia coronata LATHAM, Ind. Orn., II, 1790, 538.

Sylvicola coronata SW. & RICH., Fauna Bor. Amer., II, 1831, 216.

Dendroica coronata GRAY, List Gen. B., App., 1842, 8.

Popular synonyms: MYRTLE BIRD. YELLOW-RUMPED WARBLER. YELLOW-CROWNED WOOD WARBLER.

The Myrtle Warbler is an abundant migrant, arriving in the spring from the first of April to the last of May, and returning in the fall from early in September to the last of October.

The range of the Myrtle Warbler lies chiefly east of the Rocky Mountains though it straggles more or less commonly westward to the Pacific coast. It breeds from the northern United States northward and winters from southern New England and southern Illinois southward to the West Indies and through Mexico to Panama.

Dendroica maculosa (Gmelin). **Magnolia Warbler.**

Motacilla maculosa GMELIN, S. N., I, ii, 1788, 984.

Sylvia maculosa LATHAM, Ind. Orn., II, 1790, 536.

Sylvicola maculosa SW. & RICH., Fauna Bor. Amer., II, 1831, 213, pl. 40.

Dendroica maculosa BAIRD, Rep. Pacific R. R. Surv., IX, 1858, 284.

Popular synonym: BLACK AND YELLOW WARBLER.

The Magnolia Warbler is an abundant migrant, arriving in the spring during the month of May, and returning in the fall from the last of August to the last of September.

The range of the Magnolia Warbler extends through North America, east of the eastern base of the Rocky Mountains, from Hudson Bay southward to Panama and the West Indies. It

breeds from the northern United States northward and southward in the Alleghanies to Pennsylvania, and it winters from the Bahamas and Mexico south to the West Indies and Panama.

Dendroica rara (Wilson). Cerulean Warbler.

Sylvia cerulea WILSON, Amer. Orn., II, 1810, 141, pl. 17, fig. 5.

Sylvia rara WILSON, Amer. Orn., III, 1811, 119, pl. 27, fig. 2.

Dendroica cerulea BAIRD, Rep. Pacific R. R. Surv., IX, 1858, 280.

Dendroica rara RIDGWAY, Auk, XIV, 1897, 97.

Popular synonyms: BLUE WARBLER. AZURE WARBLER. WHITE-THROATED WARBLER.

The Cerulean Warbler is a rare summer resident in the heavy timber of DuPage County, Illinois, and a few probably breed in the woods bordering the Desplaines River at River Forest. Mr. B. T. Gault has observed this species during the summer months in DuPage County and at Lake Forest, Illinois. It arrives from about the tenth to the twentieth of May, and departs early in September. Mr. H. K. Coale informs me that he shot a male Cerulean Warbler at Winnetka, Illinois, on May 12, 1879, and that he also found them breeding in woods seven miles west of Lake Forest, Illinois, in 1876.

The range of the Cerulean Warbler covers the eastern United States, east of the Rocky Mountains and chiefly west of the Alleghanies, and from southern Canada southward, in winter, to Central America and northern South America. It breeds from about the latitude of 35° northward, especially in the heavily wooded districts of the Mississippi Valley.

Dendroica pensylvanica (Linnaeus). Chestnut-sided Warbler.

Motacilla pensylvanica LINNAEUS, S. N., ed. 12, I, 1766, 333.

Sylvia icterocephala LATHAM, Ind. Orn., II, 1790, 538.

Sylvicola icterocephala JARDINE, ed. Wilson's Amer. Orn., I, 1832, 248.

Dendroica pensylvanica BAIRD, Rep. Pacific R. R. Surv., IX, 1858, 279.

At the present time the Chestnut-sided Warbler is an abundant migrant, arriving in the spring during the month of May, and returning in the fall from about the ninth of September to the third of October. In his list of the birds of Cook County, Illinois,* Mr. Robert Kennicott includes this species with the notation "Abundant," and also states that, at that time, it was known to breed in the county. In his Birds of Northeastern Illi-

*Trans. Illinois State Agri. Society, Vol. I, 1853-1854, 583.

nois,† Mr. E. W. Nelson speaks of it as an "Abundant migrant. Breeds sparingly away from the Lake."

The range of the Chestnut-sided Warbler covers the United States, east of the Plains. It breeds from about the latitude of central Illinois northward to the southern portion of the British Possessions and as far west as Manitoba, and in the Alleghanies as far south as Georgia. It winters from the Bahamas and eastern Mexico southward at least to Panama.

Dendroica castanea (Wilson). Bay-breasted Warbler.

Sylvia castanea WILSON, Amer. Orn., II, 1810, 97, pl. 14, fig. 4.

Sylvia autumnalis WILSON, Amer. Orn., III, 1811, 65, pl. 23, fig. 3.

Dendroica castanea BAIRD, Rep. Pacific R. R. Surv., IX, 1858, 276.

Popular synonym: AUTUMNAL WARBLE.

As a rule, the Bay-breasted Warbler is a common migrant, although some seasons it is rather uncommon in its passage through our area. In the spring it arrives from the last of April to the last of May, and returns in the fall from the last of August to the last of September.

The range of this Warbler covers the United States east of the Great Plains, breeding from northern New England and northern Michigan northward. It winters southward through eastern Mexico and Central America to northern South America.

Dendroica striata (Forster). Black-poll Warbler.

Muscicapa striata FORSTER, Philos. Trans., LXII, 1772, 406, 428.

Sylvia striata LATHAM, Ind. Orn., II, 1790, 527.

Sylvicola striata SW. & RICH., Fauna Bor. Amer., II, 1831, 218.

Dendroica striata BAIRD, Rep. Pacific R. R. Surv., IX, 1858, 280.

Popular synonyms: BLACK CAP WARBLE. BLACK AND WHITE WARBLE.

The Black-poll Warbler is a common migrant, arriving in the spring during the month of May, and returning in the fall from about the tenth of September to the fourth of October.

The range of this Warbler extends over North America east of the Rocky Mountains, and it breeds from the Catskill Mountains and northern New England northward to Alaska and Greenland. In the winter it migrates southward through the West Indies to South America where it is found as far south as Brazil and Chili. It has not been recorded from either Mexico or Central America, though during its migrations it has been observed in New Mexico.

†Bull. of the Essex Institute, Vol. VIII, 1876, 99

Dendroica blackburniæ (Gmelin). **Blackburnian Warbler.**

Motacilla blackburniæ GMELIN, S. N., I., ii, 1788, 977.

Sylvia blackburniæ LATHAM, Ind. Orn., II, 1790, 527.

Sylvicola blackburniæ SWAINSON, Philos. Mag., n. s., I, 1827, 434.

Dendroica blackburniæ BAIRD, Rep. Pacific R. R. Surv., IX, 1858, 274.

Popular synonyms: ORANGE-THROATED WARBLER. HEMLOCK WARBLER.

The Blackburnian Warbler is a common migrant, which in the spring may appear within our limits from the last of April to the first of May, and again in the fall from the middle of August to the last of September.

The range of this Warbler covers North America chiefly east of Manitoba and the Plains, casually west to Utah, New Mexico and western Texas. It breeds from the northern United States northward to the southern shores of Hudson Bay, the Alleghany mountains south to western North Carolina, and in the higher altitudes of South Carolina (Pickens County) and eastern Tennessee (Roan Mountains). It winters southward through eastern Mexico and Central America to Peru in South America, and to the Bahama Islands.

Dendroica dominica albilora Ridgway. **Sycamore Warbler.**

Dendroica dominica var. *albilora* BAIRD, MS., RIDGWAY, Amer. Nat., VII, Oct. 1873, 606.

Dendroica dominica var. *albilora* NELSON, Bull. Essex Inst., VIII, 1876, 99.

Dendroica dominica albilora RIDGWAY, A. O. U. Check List, 1895, 278.

In 1876, Mr. Nelson reported this species as follows:* "A very rare summer visitant from the south." Mr. T. H. Douglas recently showed me a fine adult male taken at Waukegan in the spring of 1876. Mr. A. W. Butler† reports it as a common summer resident in southern Indiana, and as a rare visitant in the vicinity of Brookville and Fort Wayne, Indiana. The Sycamore Warbler has been reported from Monroe County and from Detroit, Michigan. There is no apparent reason why this Warbler should not be found in our area, particularly in the swampy portions of Cook County and Lake County, Indiana.

The range is given as follows in the A. O. U. Check-list: "Mississippi Valley, west to the Plains, north to Lake Erie and southern Michigan, and east to western North Carolina; in winter south to southern Mexico, Honduras, Guatemala and Nicaragua."

*Birds of Northeastern Illinois, p. 99.

†Birds of Indiana, p. 1065.

Dendroica virens (Gmelin). Black-throated Green Warbler.*Motacilla virens* GMELIN, S. N. I. ii, 1788, 985.*Sylvia virens* LATHAM, Ind. Orn., II, 1790, 537.*Sylvicola virens* JARDINE, ed. Wilson's Amer. Orn., I, 1832, 279.*Dendroica virens* BAIRD, Rep. Pacific R. R. Surv., IX, 1858, 267.

The Black-throated Green Warbler is a common migrant, arriving in the spring from the last of April to the last of May, and returning in the fall from the fourth of September to the middle of October. Mr. E. W. Nelson says:* "A few remain to breed."

The range of this Warbler covers North America east of the Plains, and from the Hudson Bay region southward. It breeds from the northern United States northward and southward along the higher Alleghanies to eastern Tennessee, western North Carolina and northwestern South Carolina. It winters southward to the West Indies and through eastern Mexico and Central America to Panama.

Dendroica kirtlandii Baird. Kirtland's Warbler.*Dendroica kirtlandii* BAIRD, Rep. Pacific R. R. Surv., IX, 1858, 286.

pl. 6.

Dendroica kirtlandii BAIRD, Rep. Pacific R. R. Surv., IX, 1858, 286.

There are but two records of the taking of the very rare Kirtland's Warbler within our limits. A fine specimen was captured in DuPage County, Illinois, on the seventh of May, 1894, by Mr. B. T. Gault, and a fine male was taken at Morgan Park, Illinois, on May 22, 1899, by Mr. Eliot Blackwelder. It was not until the year 1903 that anything was known regarding either the breeding range or the nesting habits of this shy Warbler. Early in June of that year Mr. E. H. Frothingham, of the museum staff of the University of Michigan at Ann Arbor, and Mr. T. G. Gale were in Oscoda County, Michigan, fishing in the Au Sable River. Mr. Frothingham, who is an experienced field ornithologist, heard the song of a strange bird, which was shot, and on their return to Ann Arbor was found to be the skin of a Kirtland's Warbler. Mr. Charles C. Adams, Curator of the Museum, appreciating the value of the discovery of this species in that locality during the summer months, and believing that it nested in that vicinity commissioned Mr. Norman A. Wood to make a thorough survey in the vicinity of Oscoda County, hoping that nests might be located. Reaching his field of labor in Oscoda County, Mr. Wood was

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 100.

eminently successful. I quote from his report: * "On July 2d, at six A. M., I started out; crossing the river bottom (near Butler bridge, Oscoda County, thirty-five miles northeast of Roscommon, Michigan) I came to a steep terrace which forms the edge of the Norway plains. This is very wet, and in places fine springs seep out. Here also is a dense growth of cedar with tamarack near the foot of the terrace. Fir, balm of Gilead and birch make up the timber. Climbing this slope I found a rather level plain with scattering Norway and jack pines. In places these have been cut off, and in their stead there has sprung up a more or less thick growth of small jack pines, yellow oak and poplar. The ground is covered with a mat of wintergreen, sweetfern and trailing arbutus. I was walking slowly through this, watching the junco, song sparrow, chipping sparrow and the vesper sparrow—the most common bird of these plains—when suddenly I heard a new song, loud, clear, joyous and full of sweet melody. This song may be described as follows: *wecche chcc-chcc-chcc-r-r-r*. The r sound is quite prolonged and loud. The first two notes are low, then the notes gradually increase in volume to the end. I thought it a Kirtland, although I had never before heard its song. I heard this song repeated at intervals of about thirty seconds, and from different directions. I tried to catch a glimpse of the singer, but for a long time failed to do so, as he kept among the thick jack pines and scrub oaks. I repeatedly tried to go where he sang last, and finally saw him flit from a bush to a yellow oak scrub and light about three feet above the ground. As I watched him he sat quite erect, threw forward his head and the wonderful song rang out. This song was remarkable because of its volume and rich melody. I was sure this was the bird for which I was in search; but in order to make certain the identity I shot it. A moment later I held in my hand a fine adult male of Kirtland's Warbler." Though Mr. Wood saw other specimens of this Warbler, both male and female, it was not until the eighth of July that he was successful in his hunt for a nest. He says: "We had nearly reached the line of Crawford County when I heard a song and on stopping, soon saw a male *Kirtlandii* singing from his favorite tree. I slipped from the wagon and secured this male. Driving on one half mile I saw a male fly to a dead tree near the road. This bird had a worm in its mouth, so I concluded that its nest was near by, and that it would go to it

* Bull. Michigan Orn. Club, Vol. V, March, 1904, 5.

with the worm. I went to the side of a large stub, and while I was watching, saw this male assume the erect singing position, throw forward his head and try to sing, still holding the worm in his mouth. This song may be written thus: *ch-ch-che-che-che-a* (the *a* long drawn out). He sang a number of times at intervals of about sixty seconds—but still held the worm. He soon spied me and seemed rather uneasy, wagging his tail after the fashion of *Dendroica palmarum*. Now the song seemed to take an anxious or scolding tone and sounded like *cha, che-chee wecha-a-a*. After watching me a few minutes he dropped from the tree (on a long glide) to the east about three rods. I suspected he was going to the nest, so I hurried to the spot, but when I reached it he was not there; so I stood still and waited. In a few minutes he was at his place on the old tree with another worm. Again he sang and wagged his tail and then dove down, but this time two rods to the west of the tree. I started to go there, when just south of the tree I flushed the female from the ground and after a close look, saw the nest. It may be imagined with what delight I beheld the first nest of this rare bird ever seen, and with what eagerness I dropped to my knees beside it to make a closer examination of its contents. There were two young birds, perhaps ten days old, and a perfect egg; this proved to be the only egg found.

"This egg was a delicate pinkish-white (since the contents were removed it has faded to a dull white) thinly sprinkled with several shades of brown spots forming a sort of wreath at the larger end. This egg is .72x.56 inches or 18 by 14 mm., and contained no embryo. The nest was built in a depression in the ground, at the foot of a jack pine about five feet tall, and was only five feet from the road. It was partly covered with low blueberries and sweetfern plants. The nest is two inches inside diameter and the same in depth, very neat and compact, and is composed of strips of soft bark and some vegetable fiber, thickly lined with fine dead grass and pine needles. A few hairs from horses' mane or tail complete the lining.

"As I sat near the nest the female came and alighted on the branch of the jack pine just back of the nest. She was not at all shy. Once she came with a worm in her mouth, but would not feed the young while I was near. The male also came, but not so close. Both birds were very restless and uneasy—only a few seconds in a place—which made it very difficult to take photographs of them."

During his stay in this summer home of the Kirtland Warblers in Crawford and Oscoda Counties, Mr. Wood saw and heard sixteen birds, and in ten days he secured two pairs of Warblers with their nests, seven young and one egg; also four adult males, making fifteen birds in all. Mr. Wood also says that he is inclined to think "the Au Sable River is the southern boundary of their breeding area and that this area extends over the greater part of the Canadian zone of Michigan, Wisconsin and perhaps Minnesota. They will probably be found breeding in favorable localities in the Upper Peninsula of Michigan, but I should not expect them north of Lake Superior." In spite of Mr. Wood's success Kirtland's Warbler must still be considered a very rare bird, and it probably breeds only in small colonies, and then only among the jack pines in favorable localities.

Mr. Robert Ridgway gives the following as the geographical range of Kirtland's Warbler: "Eastern United States and more southern British Provinces, chiefly west of the Alleghanies; very irregularly distributed and breeding range unknown; has been found in the following states: Ohio, Indiana, Illinois, Missouri, Minnesota, Wisconsin, Michigan, Virginia, South Carolina; also in Ontario. Winters in the Bahamas."

***Dendroica vigorsii* (Audubon). Pine Warbler.**

Sylvia pinus WILSON, Amer. Orn., III, 1811, 25, pl. 19, fig. 4.

Sylvia vigorsii AUDUBON, Orn. Biog., I, 1832, 153, pl. 30.

Sylvicola pinus JARDINE, ed. Wilson's Amer. Orn., I, 1832, 316, pl. 19, fig. 4.

Dendroica pinus BAIRD, Rep. Pacific R. R. Surv., IX, 1858, 277.

Dendroica vigorsii RIDGWAY, Proc. U. S. Nat. Mus., VIII, September 2, 1885, 356.

Popular synonym: PINE CREEPING WARBLER.

The Pine Warbler is a rather rare migrant, arriving in the spring from the middle of April to the last of May, and returning in the fall from the twentieth of September to the twelfth of October. Mr. E. W. Nelson considers it a common migrant and says: "The first of July, 1874, I found a large number of these birds with young just old enough to follow their parents, in the 'Pinery,' and presume they nest there regularly." Dr. A. W. Brayton says:* "Nelson found both young and old in the pine barrens, Lake County, where they undoubtedly breed regularly."

The range of the Pine Warbler covers North America east of the Great Plains; and from New Brunswick, Ontario and

*Proc. Indiana Hort. Society, 1879, 108.

Manitoba southward to the Bahamas and the Gulf of Mexico. It breeds nearly throughout its range and winters chiefly south of latitude 40°.

Dendroica palmarum (Gmelin). **Palm Warbler.**

Motacilla palmarum GMELIN, S. N., L. ii, 1788, 951.

Dendroica palmarum BAIRD, Rep. Pacific R. R. Surv., 1858, 288.

Popular synonyms: **YELLOW RED-POLL WARBLER.** **WAGTAIL WARBLER.**
TITLARK WARBLER. **TIP-UP WARBLER.** **RED-POLL WARBLER.**

The Palm Warbler is an abundant migrant, arriving in the spring from the twenty-first of April to the twenty-fourth of May, and returning in the fall from the tenth of September to the middle of October. It is more common in the spring than in the fall.

The range of this Warbler extends over the interior of North America, from the Great Slave Lake southward, in winter, to the south Atlantic and Gulf states, the West Indies and Mexico. It breeds chiefly north of the United States.

Dendroica discolor (Vieillot). **Prairie Warbler.**

Sylvia discolor VIEILLOT, Ois. Amer. Sept., I, 1807, 37, pl. 98.

Dendroica discolor BAIRD, Rep. Pacific R. R. Surv., IX, 1858, 290.

Popular synonym: **CHESTNUT-BACKED YELLOW WARBLER.**

The following are the only records that I have found regarding the occurrence of the Prairie Warbler within our limits. Mr. E. W. Nelson says:* "A very rare spring and summer visitant, perhaps breeding. But very few specimens have been taken in the vicinity of Chicago. Dr. Hoy writes that he knows of but one instance of its capture in Wisconsin." Mr. George Clingman informs me that he took a pair at Bryn Mawr, Chicago, during the second week of June, 1878. He also took a nest and eggs of this species at Forty-eighth Street and Vincennes Avenue, Chicago, on May 22, 1892.

The range of the Prairie Warbler covers the United States east of the Great Plains, and from southern Wisconsin, Michigan and southern New England southward. It breeds nearly throughout its range in suitable localities, and winters in southern Florida and the West Indies.

Genus **SEIURUS** Swainson, 1827.

Seiurus aurocapillus (Linnaeus). **Oven-bird.**

Motacilla aurocapilla LINNÆUS, S. N., ed. 12, I, 1766, 334.

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 100.

Sciurus aurocapillus SWAINSON, Zool. Journ., III, 1827, 171.

Turdus aurocapillus LATHAM, Ind. Orn., II, 1790, 328.

Popular synonyms: GOLDEN-CROWNED WAGTAIL OR THRUSH. WOOD WAGTAIL.

The Ovenbird is a common migrant and a rare summer resident. It arrives in April, and departs late in October.

The range of this species covers eastern North America, from Alaska and the region of Hudson Bay southward, in winter, to Florida, the West Indies, and from Mexico south to Panama. It breeds from Kansas, the Ohio Valley and the mountain regions of South Carolina northward.

***Sciurus noveboracensis* (Gmelin). Water-thrush.**

Motacilla noveboracensis GMELIN, S. N., I, ii, 1788, 958.

Turdus (Sciurus) noveboracensis NUTTALL, Man., I, 1832, 353.

Sciurus noveboracensis BONAPARTE, Geog. & Comp. List, 1838, 21.

Popular synonyms: WATER WAGTAIL. NEW YORK WATER-THRUSH. WATER KICK-UP. SMALL-BILLED WATER-THRUSH.

In his "Catalogue of Animals Observed in Cook County, Illinois,"* Mr. Robert Kennicott lists the Water-thrush and states that it was known to nest within the County. Mr. E. W. Nelson, in his "Birds of Northeastern Illinois" records this species and says: "An abundant migrant; April 1st to May 10th, and August 25th to October 25th. Found everywhere in damp woods or along the banks of streams during the migrations. A very few remain to breed in secluded woods."

Previous to the year 1880 varietal forms of this species had been given no subspecific names. In that year, Mr. Robert Ridgway recognized† Mr. G. B. Grinnell's separation of the western form of this Water-thrush under the name *Sciurus naevius notabilis* which later became *Sciurus noveboracensis notabilis* Ridgway. It will be noticed that all the forms of this species were included under the name *noveboracensis* at the time Mr. Kennicott and Mr. Nelson made their observations. Since the time of Mr. Nelson's list (1876), I have been unable to find more than one authentic record of the taking, within our limits, of a typical specimen of *noveboracensis*. In the bird collection of the Field Museum of Natural History, Jackson Park, Chicago, there is a specimen of the *noveboracensis*, which is a typical male of the species, collected by Mr. Henry K. Coale at Grand Crossing, Chicago, on May 21, 1887. This would indicate the possibility of an occasional finding of birds of this species within our limits.

*Trans. Illinois State Agri. Society, Vol. I, 1853-1854, 582.

†Proc. U. S. Nat. Mus., III, March 27, 1880, 12.

It would seem, therefore, that it is highly probable that nearly all, if not all of the birds of this species observed before the year 1880 would now be classed under the subspecies *notabilis*.

It is not impossible that more typical specimens of this more eastern form of the Water-thrush may yet be taken within our limits. I have examined a series of specimens, taken in this vicinity, which showed characteristics varying from typical *notabilis* to very nearly typical *noveboracensis*. It is well understood that there are intermediate forms between the variety and the type of the species. It is important, therefore, that all Water-thrushes, belonging to this species, which are taken in north-eastern Illinois, should be carefully studied.

Mr. Ridgway gives the following as the range of this species: * "Eastern North America; north to Davis Inlet, Newfoundland, and shores of Hudson Bay; breeding southward to northern New England, mountains of Pennsylvania and West Virginia, southern Michigan (?), northeastern Illinois (?), etc.; in winter southward throughout West Indies and along eastern coast districts of Central America to Colombia, Venezuela, British Guiana, Brazil (?), Trinidad, and Tobago, and to Swan Island and Old Providence Island, Caribbean Sea."

***Scirurus noveboracensis notabilis* (Ridg.). Grinnell's Water-thrush.**

Scirurus noveboracensis BAIRD, Rep. Pacific R. R. Surv., IX, 1858, 261. part; and of many other early writers on Illinois and western birds.

Scirurus naevius notabilis RIDGWAY, Proc. U. S. Nat. Mus., III, March 27, 1880, 12.

Scirurus noveboracensis notabilis RIDGWAY, Proc. U. S. Nat. Mus., VIII, Sept. 2, 1885, 354; 564.

Popular synonym: WYOMING WATER-THRUSH.

The Grinnell's Water-thrush is an abundant migrant, arriving in the spring about the first of May, and returning in the fall near the last of September. This Water-thrush, which without question is the most abundant of the water-thrushes frequenting our area, so closely resembles *Scirurus noveboracensis* that it seems best for me to include a description of this variety. This I quote from Mr. Robert Ridgway's Birds of North and Middle America.† "Similar to *S. n. noveboracensis*, but larger, especially the bill; coloration of the upper parts less olive (more grayish sooty), that of under parts less yellowish, usually white, with little if any yellow tinge. Young much darker above than

*Bull. U. S. Nat. Mus., No. 50, Pt. ii, 1902, 642.

†Bull. U. S. Nat. Mus., No. 50, pt ii, 1902, 645.

that of *S. n. noveboracensis*, the feathers entirely dusky (except the buffy tip), instead of olive with a subterminal bar of dusky." He also says that he is not sure that the differences between the young of the two forms, as stated above, are constant as he had but one specimen of each form to examine. Mr. Ridgway also states that the "Mississippi Valley specimens average smaller than those from the Rocky Mountains and westward, and are really intermediate in size between *S. n. notabilis* and *S. n. noveboracensis*."

The range of this Water-thrush may be given as western North America, and passing more or less commonly during its migrations through the Mississippi Valley as far eastward as Indiana, and much more rarely through the states of the Atlantic coast to the Bahamas, Cuba, and through Mexico and Central America to northern South America.

***Seiurus motacilla* (Vieillot). Louisiana Water-thrush.**

Turdus motacilla VIEILLOT, Ois. Amer. Sept., II, 1807, 9, pl. 65.

Seiurus ludoricianus BONAPARTE, Geog. and Comp. List, 1838, 21.

Seiurus motacilla BONAPARTE, Consp. Av., I, 1850, 306.

Siurus motacilla COUES, Bull. Nutt. Orn. Club, II, 1877, 33.

Popular synonyms: LARGE-BILLED WATER-THRUSH. WATER WAGTAIL. WAGTAIL.

The Louisiana Water-thrush is a rare summer resident, arriving about the last of April, and departing about the first of September. In 1876 Mr. E. W. Nelson recorded it as a "not uncommon summer resident."

The range of this species includes the United States, east of the Great Plains and from southern New England and southern Michigan southward in winter to the West Indies and through Mexico and Central America to Panama. It is a casual visitor further north than the above range. It breeds quite throughout its range within the United States.

Genus **OPORORNIS** Baird, 1858.

***Oporornis formosa* (Wilson). Kentucky Warbler.**

Sylvia formosa WILSON, Amer. Orn., III, 1811, 85, pl. 25, fig. 3.

Oporornis formosus BAIRD, Rep. Pacific R. R. Surv., IX, 1858, 247.

Geothlypis formosa RIDGWAY, Proc. U. S. Nat. Mus., VIII, 1885, 354.

At the present time the Kentucky Warbler is certainly a very rare summer visitant from southern Illinois." In his report published in 1876, Mr. E. W. Nelson says*: "A very rare summer visitant from southern Illinois." The only other records of its appearance in our vicinity are the following. Dr. flocks along the Lake shore and on bare prairies during the migra-

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 101.

records of its appearance in our vicinity are the following. Dr. Joseph L. Hancock says:† "I secured a female of *Oporornis* (*Geothlypis*) *formosa* one-half mile southeast of Grand Crossing, among the undergrowth in a small isolated patch of woods. The finding of this species in that locality is an event of unusual interest. A specimen has been reported to me by my friend Mr. H. K. Coale, of Chicago, as found by Mr. R. B. Trouslet at Plano, Illinois, a few years ago." Mr. George Klingman took a specimen at Bryn Mawr, Chicago, during the first week in May, 1892.

As the Kentucky Warbler is an abundant species in southern Illinois, it is quite possible that it may appear at times as a straggling summer visitant within our limits and the field students of ornithology should watch for it in the woodlands of our area.

The range of the Kentucky Warbler extends through the United States, east of the Great Plains and from southern New England, southern Michigan, southern Wisconsin, Iowa and eastern Nebraska southward to the Gulf of Mexico and, in winter, through Mexico and Central America to Colombia. It is also a casual winter visitor to Cuba and other islands of the West Indies. It breeds nearly throughout its United States range.

***Oporornis agilis* (Wilson). Connecticut Warbler.**

Sylvia agilis WILSON, Amer. Orn., V. 1812, 64, pl. 39, fig. 4.

Trichas agilis NUTTALL, Man., ed. 2, I, 1840, 463.

Trichas tephrocotis NUTTALL, Man., ed. 2, I, 1840, 462.

Oporornis agilis BAIRD, Rep. Pacific R. R. Surv., IX, 1858, 246.

Geothlypis agilis GREGG, Proc. Elmira Acad. Sci., 1870, (reprint, p. 7).

Popular synonym: GRAY-HEADED WARBLER.

The Connecticut Warbler is a not uncommon migrant, arriving in the spring from the middle of May to the first week in June, and returning in the fall from about the middle of August to the last of September. This species, like the Mourning Warbler, is not generally thought to be even a frequent visitor to our vicinity, for it is a shy bird and is seldom found away from bushy swamps and heavy underbrush and is, therefore, easily overlooked.

The range of the Connecticut Warbler extends through eastern North America, breeding chiefly north of the United States and west of Ontario. In the spring, it migrates chiefly through the Mississippi Valley, but in the fall probably the larger number

†Auk, Vol. V, April, 1888, 210.

return southward through the states of the Atlantic coast. It winters, so far as is known, in the Bahamas and in northern South America.

Oporornis philadelphia (Wilson). Mourning Warbler.

Sylvia philadelphia WILSON, Amer. Orn., II, 1810, 101, pl. 14, fig. 6.

Trichas philadelphia JARDINE, ed. Wilson's Amer. Orn., I, 1832, 249.

Geothlypis philadelphia BAIRD, Rep. Pacific R. R. Surv., IX, 1858, 243.

Oporornis philadelphia RIDGWAY, B. of N. & Mid. Amer., Bull. U. S. Nat. Mus., No. 50, pt. ii, 1902, 628.

Popular synonym: BLACK-THROATED GROUND WARBLER.

The Mourning Warbler is a rather rare migrant, arriving about the same time, and may be found in about the same localities as the Connecticut Warbler. At the present time this species is becoming more abundant than it has been, particularly in the city parks of Chicago.

The range of the Mourning Warbler covers North America, east of the Great Plains. It breeds from the northern portion of the United States, especially in the higher altitudes, northward. It winters in southern Mexico, Central America and northern South America.

Oporornis tolmiei (J. K. Townsend). Macgillivray's Warbler.

Sylvia tolmiei J. K. TOWNSEND, Narrative, April, 1839, 343.

Geothlypis macgillivrayi BAIRD, Rep. Pacific R. R. Surv., IX, 1858, 244.

Geothlypis tolmiei STONE, Auk, XVI, Jan., 1899, 82.

Oporornis tolmiei RIDGWAY, Bull. U. S. Nat. Mus., No. 50, ii, 1902, 631.

In the Catalogue of Birds in the British Museum, Professor R. Boulder Sharpe records a specimen of the Macgillivray's Warbler from our region, collected by Mr. H. K. Coale.

Mr. Coale informs me that the specimen was taken by himself at Wolf Lake, Indiana, on June 1, 1879.

In his "Birds of North and Middle America,"* Mr. Ridgway gives the following as the range of this Warbler: "Western United States and British Columbia; breeding in mountains from Pacific coast ranges to Rocky Mountains, north to British Columbia (including Vancouver Island), south at least to Arizona, New Mexico, and western Texas; during migrations east to western Nebraska, central Texas, etc.; south in winter to Cape St. Lucas and over whole of Mexico and Central America to Colombia."

*Bull. U. S. Nat. Mus. No. 50, pt. ii, 1902, 632.

Genus **GEOTHTYPIS** Cabanis, 1827.**Geothlypis trichas brachidactyla** (Swains.). **Northern Yellow-throat.***Sylvia trichas* NUTTALL, Man., 1, 1832, 401, part.*Geothlypis trichas* CABANIS, in Nelson's Birds N. E. Illinois, Bull. Essex Institute, Vol. VIII, 1876, 101.*Geothlypis trichas* A. O. U. Check-list, 1895, No. 681, part.*Geothlypis trichas occidentalis* A. O. U. Check-list, 1895, No. 681 a, part.*Geothlypis trichas brachidactyla* PALMER (W), Auk, XVII, July, 1900, 221 (crit.).*Trichas brachidactyla* SWAINSON, Anim. in Menag., 1838, 295 ("Northern Provinces of United States").

This Yellow-throat is a common summer resident, arriving the last of April, and departing early in October.

The form of this perplexing species which occurs within our limits has been placed by writers under both *trichas* and *trichas occidentalis*. While typical *trichas* is a distinctly eastern form not being found west of southern Pennsylvania, excepting a single accidental specimen taken in Knox County, Indiana, on May 5, 1885 (Ridgway*), typical *trichas occidentalis*, on the other hand, is a distinctly western form and not found east of the western portion of the Great Plains. I have examined quite a series of specimens taken by various collectors within our limits. These show considerable variation, some approaching the eastern *trichas*, and others the western *trichas occidentalis*. However, the measurements and colors of all the specimens are such as to place them under *trichas brachidactyla*, a varietal name recognized by both Palmer† and Ridgway‡ for the northern form of the Yellow-throat.

Mr. Ridgway gives the following as the range of the Northern Yellow-throat:‡ "Northeastern United States and southeastern British Provinces, from Newfoundland, southern Labrador, Quebec, Nova Scotia, New Brunswick, the New England States, Long Island, New York, and northern New Jersey, westward to northern Ontario, Michigan, Wisconsin, Minnesota, and eastern North Dakota, and southward through Mississippi Valley to upland districts of the Gulf States (?), and east-central Texas; in winter, Bahamas, Cuba, Jamaica, Porto Rico (?), Swan Island, and through eastern Mexico, and Yucatan, to Guatemala, Nicaragua, and Costa Rica; whole United States east of the Great Plains during migration."

*Bull. U. S. Nat. Mus., No. 50, pt. ii, 1902, 662.

†Auk, Vol. XVII, July, 1900, 221.

‡Bull. U. S. Nat. Mus., No. 50, pt. ii, 1902, 665.

Genus **ICTERIA** Vieillot, 1807.**Icteria virens** (Linnaeus). **Yellow-breasted Chat.***Turdus virens* LINNÆUS, S. N., ed. 10, 1, 1758, 171.*Icteria viridis* BONAPARTE, Journ. Acad. Nat. Sci. Philadelphia, IV, 1825, 252.*Icteria virens* BAIRD, Review Amer. Birds, April, 1865, 228.Popular synonym. **YELLOW MOCKINGBIRD.**

The Yellow-breasted Chat is a not uncommon summer resident, breeding in the heavy shrubbery in parts of our area. It arrives early in May, and departs about the last of August. In certain portions of Cook County, Mr. J. Grafton Parker and myself have found this species breeding quite plentifully.

The range of this Warbler is the United States east of the Great Plains. It breeds from the Gulf of Mexico northward to Ontario and southern New England, and it winters through eastern Mexico, and Central America to Costa Rica.

Genus **WILSONIA** Bonaparte, 1838.**Wilsonia mitrata** (Gmelin). **Hooded Warbler.***Motacilla mitrata* GMELIN, S. N., I., pt. ii, 1788, 977.*Sylvia mitrata* LATHAM, Ind. Orn., 11, 1790, 528.*Myiodioctes mitrata* AUDUBON, Birds Amer., Oct., ed. ii, 1841, 12, pl. 71.*Muscicapa selbyi* AUDUBON, Orn. Biog., 1, 1831, 46, pl. 9.*Sylvania mitrata* NUTTALL, Man., ed. 2, 1, 1840, 333.*Wilsonia mitrata* BONAPARTE, Geog. and Comp. List, 1838, 23.Popular synonyms: **HOODED FLYCATCHING WARBLER. SELBY'S WARBLER. BLACK-HEADED WARBLER. MITRED WARBLER. BLACK-CAP WARBLER.**

The Hooded Warbler is a rare migrant at the present time, and the only records of its occurrence within our limits are the following: Mr. E. W. Nelson says: "A rare summer resident; arriving May 10th to 20th, and leaving early in autumn." On May 11, 1881, Mr. B. T. Gault took a specimen at River Forest, Illinois. Mr. J. Grafton Parker, Jr., has the skin of a fine male bird which was taken in Hyde Park, Chicago, on April 28, 1884, by a boy who shot it with a sling-shot. In an article on the migrations of the Hooded Warbler,* Mr. W. W. Cooke reports this species as having been taken at Chicago on March 28, 1884, and on May 3, 1895.

The range of the Hooded Warbler covers the United States from Massachusetts, southern Ontario, southern Michigan and

*Bird Lore, Vol. VI, No. 1, January-February, 1904.

southern Wisconsin southward. It breeds from Texas and the Gulf of Mexico northward, and winters in the West Indies, eastern Mexico and through Central America to Panama.

Wilsonia pusilla (Wilson). Wilson's Warbler.

Muscicapa pusilla WILSON, Amer. Orn., 111, 1811, 103, pl. 26, fig. 4.

Sylvia wilsonii BONAPARTE, Journ. Acad. Nat. Sci. Philadelphia, IV, 1824, 179.

Wilsonia pusilla BONAPARTE, Geog. and Comp. List, 1838, 23.

Sylvania pusilla NUTTALL, Man., ed. 2, I, 1840, 335, part.

Myiodiectes pusillus BAIRD, Lit. Rec. and Journ. Linn. Assoc. Penn. Coll., I, Oct., 1845, 252.

Popular synonyms: WILSON'S BLACK-CAP. GREEN BLACK-CAPPED WARBLER. BLACK-CAPPED YELLOW WARBLEE.

Wilson's Warbler is a not uncommon migrant, arriving in the spring during the month of May, and returning in the fall from about the middle of August to the latter part of September.

The range of the Wilson's Warbler extends over the eastern portion of North America, east of the Great Plains and from Newfoundland, Labrador, the shores of Hudson Bay and Manitoba southward. It breeds north of the United States and migrates in winter through eastern Mexico into Central America.

Wilsonia canadensis (Linnæus). Canadian Warbler.

Muscicapa canadensis LINNÆUS, S. N., ed. 12, I, 1766, 327.

Sylvia pardalina BONAPARTE, Journ. Acad. Nat. Sci. Philadelphia, IV, 1824, 179.

Myiodiectes canadensis AUDUBON, Synop., 1839, 49.

Sylvania bonapartii NUTTALL, Man., ed. 2, I, 1840, 332.

Wilsonia canadensis COUES, Bull. Nutt. Orn. Club, V, April 1880, 95.

Sylvania canadensis RIDGWAY, Proc. U. S. Mus., VIII, 1885, 354.

Popular synonyms: CANADA FLYCATCHER or WARBLER. BONAPARTE'S WARBLER. CANADIAN FLYCATCHING WARBLER. NECKLACED WARBLER.

The Canadian Warbler is a not uncommon migrant, arriving from the first to the last of May, and returning in the fall from the middle of August to the middle of September. Mr. E. W. Nelson records* it as a "rare summer resident."

The range of this species covers North America, east of the Great Plains and from Newfoundland and southern Labrador and Manitoba southward. It breeds from Massachusetts, central New York, northern Michigan and Minnesota northward, and southward in the Alleghany Mountains to North Carolina. It winters southward through eastern Mexico and Central America to northern South America.

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 101.

Genus **SETOPHAGA** Swainson, 1827.

Setophaga ruticilla (Linnaeus). **American Redstart.**

Motacilla ruticilla LINNÆUS, S. N., ed. 10, 1, 1758, 186.

Muscicapa ruticilla LINNÆUS, S. N., ed. 12, 1, 1766, 326.

Setophaga ruticilla SWAINSON, Phil. Mag., 1, May, 1827, 368.

Popular synonyms: BLACK-AND-RED WARBLER. YELLOW-TAILED WARBLER or FLYCATCHER. FAN-TAILED WARBLER or FLYCATCHER.

The American Redstart is a common summer resident, arriving early in May, departing about the last of September.

The range of this species covers temperate North America in general, though it is rare west of the Rocky Mountains within the borders of the United States. It breeds through its United States range and northward to Nova Scotia, Mackenzie, and on the Pacific coast to southern Alaska. It winters in the West Indies, Mexico, and southward through Central America to the northern portions of South America.

FAMILY MOTACILLIDÆ: WAGTAILS AND PIPITS.

Genus **ANTHUS** Bechstein, 1807.

Anthus pensilvanicus (Latham). **American Pipit.**

Mlanda pensilvanica LATHAM, Synop. Birds, Suppl., 1, 1787, 287.

Anthus ludovicianus LICHTENSTEIN, Verz. Doubl., 1823, 37.

Anthus pensilvanicus THIENEMANN, Rheu., II, 1849, 171.

Popular synonyms: TITLARK. AMERICAN TITLARK. PENNSYLVANIA PIPIT. LOUISIANA PIPIT.

The American Pipit is a not uncommon migrant. The majority of these birds arrive early in April and stay in our vicinity until about the middle of May. In the fall they return about the tenth of September and remain until late in October. The earliest of their arrival in the spring, of which I have any account, is that of Mr. J. Grafton Parker, Jr., who took one at Grand Crossing, Chicago, on March 14, 1885. The latest fall record for this vicinity is a specimen which I took at Liverpool, Indiana, on October 27, 1896. Mr. E. W. Nelson says:* "Common in flocks along the Lake shore and on prairies during the migrations. Arrives about the fifteenth of May. It is then just assuming the breeding dress, and remains until about the thirtieth, when, its moult being completed, it moves north."

The range of the American Pipit covers the whole of North America, but it breeds only in subarctic regions and in the higher

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. XIII, 1876, 97.

altitudes of the Rocky Mountains from Colorado northward where it is said to nest on the ground above timber line. It winters in the southern portion of the United States and southward through Mexico and Central America to Guatemala.

FAMILY MIMIDÆ: THRASHERS, ETC.

Genus **MIMUS** Boie, 1826.

Mimus polyglottos (Linnæus). **Mockingbird.**

Turdus polyglottos LINNÆUS, S. N., ed. 10, I, 1758, 169.

Turdus polyglottus GMELIN, S. N., I, 1788, 812.

Mimus polyglottus BONAPARTE, Geog. and Comp. List, 1838, 17.

Popular synonym: SOUTHERN MOCKINGBIRD.

The Mockingbird is certainly a very rare visitant to our area. The history of its occurrence within our limits is shown, so far as I have been able to obtain the information, by the following records: Mr. Robert Kennicott reports it as rare, and states that it is known to nest in Cook County.* Mr. E. W. Nelson says:† "A very rare summer resident. I know of but few instances of its occurrence in the vicinity of Chicago. Dr. Hoy has recorded six nests obtained in the vicinity of Racine, Wisconsin." In his report on the birds of Illinois,‡ Mr. Robert Ridgway gives the following information: "Mr. H. K. Coale informs me that he saw a Mockingbird in Starke County, Indiana, sixty miles southeast of Chicago, January 1, 1884; that Mr. Green Smith had met with it at Kensington Station, Illinois, and that several have been observed in the parks and dooryards of Chicago." Mr. H. K. Coale has sent me the following note: "On August 30, 1876, I found a dead full grown Mockingbird under a tree in Chicago, a heavy rain during the night before having probably killed it. It was evidently not a cage bird." A valuable record which I have is that of Dr. Joseph L. Hancock, of Chicago, who has kindly sent me the following interesting notes: "On April 29, 1902, in the south end of South Park, Chicago, I noticed a Mockingbird on the ground in the mowed grass. When approaching near the spot where the bird was foraging, it became frightened and flew across the driveway finally alighting in a tree. The bird was in beautiful fresh plumage, it probably being a male, because of the bright coloring and the large white patches on

*Trans. Illinois State Agri. Society, Vol. I, 1853-1854, 582.

†Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 94.

‡Ornithology of Illinois, Vol. I, 1889, 105.

the wings which were conspicuously displayed during flight especially just before alighting.

"The warm wind coming from the south, accompanied with a high velocity and elevated temperature, doubtless accounted for the presence of this bird here, along with the great number of the migrants which came at the same time. The temperature of that day, which is herewith appended, offers confirmation of the fact that this rare southern visitor into our northern latitude was not a cage bird.

"The hourly temperature readings from midnight to three o'clock in the afternoon is as follows:

Midnight,	64	Eight A. M.,	64
One A. M.,	63	Nine A. M.,	69
Two A. M.,	62	Ten A. M.,	72
Three A. M.,	61	Eleven A. M.,	74
Four A. M.,	60	Twelve A. M.,	75
Five A. M.,	60	One P. M.,	77
Six A. M.,	61	Two P. M.,	78
Seven A. M.,	62	Three P. M.,	78

"I saw the Mockingbird first at eleven o'clock in the morning, when the temperature was 74 degrees Fahrenheit. The next day the temperature dropped rapidly so that at one o'clock in the afternoon it fell to 36 degrees, causing, as might be expected, considerable suffering among the more delicately constituted migrants." At Millers, Indiana, on the eighth of May, 1905, Mr. Frank C. Baker and myself observed a pair of Mockingbirds in the long line of thickets just east of the first ridge of dunes. We did not disturb the birds, hoping that they might nest and breed in that locality.

The range of the Mockingbird includes the southern United States from Mexico north to southern Maryland, southern Ohio, southern Indiana, southern Illinois, Colorado, and southern California. North of this area it is rare or of very irregular appearance as far north as Maine, Ontario, northern Illinois, and Wyoming.

Genus **GALEOSOPTES** Cabanis, 1850.

Galeoscoptes carolinensis (Linnæus). Catbird.

Muscicapa carolinensis LINNÆUS, S. N., ed. 12, I, 1766, 328.

Galeoscoptes carolinensis CABANIS, Mus. Heim., I, 1850, 82.

Mimus carolinensis "GRAY," SCL., P. Z. S., 1856, 294.

Mimus felivox BONAPARTE, of some early writers.

Popular synonym: ENGLISH MOCKINGBIRD.

The Catbird is an abundant summer resident, arriving the last of April and departing early in October.

The Catbird has an extended range covering the United States east of and including the Rocky Mountains, and from the Saskatchewan Valley southward. It is rare on the Pacific coast from central California north to British Columbia. It breeds nearly throughout its range north of the Gulf of Mexico, and winters in the southern portion of the United States and southward to Panama.

Genus **TOXOSTOMA** Wagler, 1831.

Toxostoma rufum (Linnaeus). **Brown Thrasher.**

Turdus rufus LINNÆUS, S. N., ed. 10, I, 1758, 169.

Toxostoma rufum CABANIS, Archf. Naturg., 1847, I, 207.

Harporhynchus rufus CABANIS, Mus. Hein., I, 1850, 82.

Mimus rufus LINNÆUS, of some early writers.

Popular synonyms: THRASHER. FOX-COLORED or SANDY MOCKINGBIRD.

FERRUGINOUS MOCKINGBIRD. FRENCH MOCKINGBIRD. MOCKINGBIRD.

The Brown Thrasher is a common summer resident, arriving about the middle of April, and departing early in October.

The range of the Brown Thrasher covers the United States east of the Rocky Mountains, and from Maine, Ontario and Manitoba southward to the Gulf of Mexico and Mexico. It breeds throughout its range, and winters from Illinois and Virginia southward.

FAMILY TROGLODYTIDÆ: WRENS.

Genus **THRYOTHORUS** Vieillot, 1816.

Thryothorus ludovicianus (Latham). **Carolina Wren.**

Sylvia ludoviciana LATHAM, Ind. Orn., II, 1790, 548.

Troglodytes ludovicianus LICHT., Verz. Doubl., 1823, 35.

Thryothorus ludovicianus BONAPARTE, Geog. and Comp. List, 1838, 11.

Popular synonyms: GREAT CAROLINA WREN. MOCKING WREN. LARGE WOOD WREN.

This interesting songster is gradually adapting itself to our northern Illinois climate, and if protected from indiscriminate collectors may become one of our familiar summer residents. In his list of the birds of Cook County,* Mr. Robert Kennicott reports it as rare, and says "I have seen but two specimens of

*Trans. Illinois State Agri. Society, Vol. I, 1853-1854, 583.

this pretty songster." Mr. E. W. Nelson reported it,† "A rare summer visitant." Thanks to the protection afforded this bird by Mr. John V. Farwell, Jr., at Lake Forest, Illinois, the species has succeeded in raising several broods in that vicinity. Mr. Spencer F. Dayton writes as follows: "As I was hunting through the Bowmanville woods, I heard the loud ringing song of this Wren coming from a distance. As it struck my ear as unfamiliar, I traced it to the northern edge of the woods and found that it came from a Carolina Wren concealed in a brush pile. Every few minutes the bird would mount to the top of a stick and, with head up and tail down would utter its clear ringing notes which sounded like the syllables *che-ho-ty*; rich and mellow were the notes and they were repeated every half minute or so for a time and then he would drop down into the bush only to reappear after a time to sing again. It did not scold or chatter as do other wrens, and its notes, heard at a distance, had the quality of those of the robin."

Mrs. John V. Farwell, Jr., informs me that she had studied the Carolina Wren in Virginia but hardly expected to ever see or hear it in the vicinity of Lake Forest, Illinois. She writes as follows: "On the morning of August 13, 1900, I was awakened by its loud clear whistle just outside of my window. It is a curious fact that the songs of our familiar birds do not awaken me, but when I hear an unusual song I am easily aroused. I have since had a good look at him. His song is a loud, clear, rapid whistle that could be heard a quarter of a mile. The syllables can be rendered *cher-o-kee*; the notes musically speaking are in A flat or D. Besides this song the only sound I heard him utter was a scolding warning; out of note, like a policeman's rattle. The whistling note was usually repeated three times. This bird has been identified by Mr. John F. Ferry and several others."

The range of the Carolina Wren extends over the United States, east of the Great Plains and from southern New England, southern New York, southern Ontario, and southern Michigan southward. It is resident nearly throughout its range.

Genus **THRYOMANES** Selater, 1861.

Thryomanes bewickii (Audubon). **Bewick's Wren.**

Troglodytes bewickii AUDUBON, Orn. Biog., I, 1831, 96, pl. 18.

Thryothorus bewickii BONAPARTE, Geog. and Comp. List, 1838, 11.

†Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 96.

Thryomanes bewickii RIDGWAY, Bull. Nutt. Orn. Club, II, July, 1877, 60.

Popular synonyms: LONG-TAILED HOUSE WREN. LONG-TAILED WREN.

Bewick's Wren must be included in the avifauna of our region because of the record of Mr. E. W. Nelson, who says: "Rare summer resident. A pair of these birds appeared in a vacant lot in Chicago the first of June, 1876, and taking possession of a convenient corner in the roof of an arbor proceeded to raise their young. At intervals through the day, the male would mount to the top of some house, or to the topmost twig of a tree in the vicinity, and sing for an hour or more. The family suddenly left about the middle of July."

While I have no other records of the appearance of this Wren within our limits, I can see no reason why it should not, at least occasionally, frequent the vicinity of Chicago. Mr. Ridgway says:* "In most parts of southern Illinois, this is the House Wren, *par excellence*; and even in localities where the true House Wren (*Troglodytes ædon*) occurs Bewick's Wren is far the more numerous of the two." Because of the above records, it is very important that all observers should constantly have Bewick's Wren in mind as a possible visitor to our vicinity. It is quite erratic in its habits and is unknown in many localities within its general range.

The range of this Wren includes the United States, east of the Great Plains and eastern Texas, and chiefly west of the Alleghany Mountains and south of southern Pennsylvania. In the Mississippi Valley it is found as far north as central Minnesota. It is a migrant only in the more northern part of its range. It has been observed in southern Michigan, northern Indiana and northern Illinois.

Genus **TROGLODYTES** Vieillot, 1807.

Troglodytes ædon Vieillot. House Wren.

Troglodytes ædon VIEILLOT, Ois. Amer. Sept., II, 1807, 52, pl. 107.

Popular synonyms: WOOD WREN. SHORT-TAILED HOUSE WREN.

At the present time the House Wren is certainly a very rare visitant to our area. The only specimen of this species that I have seen from our vicinity is one taken by Mr. Graham Davis in Hyde Park, Chicago, on May 16, 1886. This specimen is in the collection of The Chicago Academy of Sciences. Mr. Amos

*Ornithology of Illinois, Vol. I, 1889, 92.

W. Butler, in his *Birds of Indiana*, reports it as having been found at Chicago on April 27, 1896. In 1853-1854, Mr. Robert Kennicott recorded this species in his list of Cook County birds,* as "abundant" and also states that it was known to nest in the county at that time. Mr. E. W. Nelson, in his *Birds of Northeastern Illinois*† says: "Rather common summer resident away from the immediate vicinity of the Lake. Arrives the first of May and departs the last of September."

I am inclined to think that the birds found during the time of Mr. Kennicott and Mr. Nelson would now be referred to *Troglodytes ædon parkmanii*.

The range of the House Wren covers the eastern United States, west to Indiana, Illinois, Missouri and Texas, and from Maine and southern Ontario southward to the Gulf of Mexico. It breeds in the northern half of its range and winters in the southern half. It is also said to breed in Florida.

***Troglodytes ædon parkmanii* (Audubon). Western House Wren.**

Troglodytes ædon NELSON, Bull. Essex. Inst., VIII, 1876, 97, 152.

Troglodytes ædon KENNICOTT, Trans. Ill. Agrie. Soc., I, 1855, 603.

Troglodytes parkmanii AUDUBON, Orn. Biog., V, 1839, 310.

Troglodytes ædon var. *aztecus* BAIRD, Review, Sept., 1864, 139.

The Western House Wren is a not uncommon summer resident, arriving about the last of April, and departing in October. This is unquestionably the common form of *ædon* found in northeastern Illinois. Some years ago a number of specimens of the house wren from our area were sent to Dr. J. A. Allen for examination. He reported that they agreed with the variety *aztecus*, even when compared with typical specimens from Arizona and other parts of the West. Mr. Robert Ridgway has also noted this form in the vicinity of Chicago.

The range of this House Wren extends through the western United States, from Mexico northward to Manitoba and the Great Slave Lake. The eastern limit of its range seems to be Wisconsin and Indiana, and it winters from Texas south.

Genus *OLBIORCHILUS* Oberholser, 1902.

***Olbiorchilus hiemalis* (Vieillot). Winter Wren.**

Troglodytes hiemalis VIEILLOT, Nouv. Dict. d'Hist. Nat., XXXIV, 1819, 514.

Anorthura troglodytes var. *hiemalis* COUES, Key, 1872, 351.

*Trans. Illinois State Agri. Society, Vol. I, 1853-1854, 583.

†Bull. of the Essex Institute, Vol. VIII, 1876, 97.

Troglodytes parvulus var. *hymalis* B. B. & R., Hist. N. Amer. B., I, 1874, 155, pl. 9, fig. 9.

Olbiorchilus hiemalis OBERHOLSER, Auk, XIX, April, 1902, 178.

Popular synonyms: BUNTY WREN. LITTLE LOG WREN.

The Winter Wren is a common migrant, arriving, in the spring, from the twenty-fifth of March to the tenth of May, and returning, in the fall, from early in September to the last of October.

The range of this species extends quite generally over North America, east of the Rocky Mountains. It breeds from the northern portions of the United States northward and in the Alleghany Mountains southward to North Carolina. It winters from Ohio, Indiana and Illinois southward at least to the Gulf of Mexico.

Genus **CISTOTHORUS** Cabanis, 1850.

Cistothorus stellaris (Lichtenstein). **Short-billed Marsh Wren.**

Troglodytes stellaris LICHTENSTEIN, in Naumann's Vög. Deutschl., III, 1823, 724.

Troglodytes brevirostris NUTTALL, Man., I, 1832, 426.

Cistothorus stellaris CABANIS, Mus. Hein., I, 1850, 77.

The Short-billed Marsh Wren is a not uncommon summer resident in suitable localities within our limits. It is, however, rarely seen on account of its shyness. On June 3, 1880, Mr. B. T. Gault found this species breeding near Sheffield, Indiana, and collected two males. At the same place, on June 28, he obtained a young bird which was about two days old. I have found the long grass of the region around Lake Calumet, Illinois, and some distance from the water, to be an excellent place for the study of this Wren.

The range of this species covers the United States, east of the Great Plains, and from southern New Hampshire, southern Ontario, and southern Manitoba southward. It breeds locally throughout its range, and winters in the Southern States.

Genus **TELMATODYTES** Cabanis, 1850.

Telmatodytes palustris iliaceus Ridgway. **Long-billed Marsh Wren.**

Troglodytes palustris SWAINSON and RICHARDSON, Fauna Bor. Amer., II, 1831, 319.

Cistothorus palustris BAIRD, Cat. N. Amer. Birds, 1859, No. 268, part; American Ornithologists' Union, Check List, 1895, No. 725, part; NELSON, Bull. Essex Inst., VIII, 1876, 97.

Telmatodytes palustris COUES, Key N. Amer. Birds, 1872, 87, part;
RIDGWAY, Amer. Nat., VII, 1873, 200.

Telmatodytes palustris iliacus RIDGWAY, Proc. Biol. Soc., Washington,
XVI, Sept. 30, 1903, 110.

Popular synonyms: GRASS WREN. PRAIRIE MARSH WREN. STINK-
BIRD.

The Long-billed Marsh Wren is an abundant summer resident in all of the marshes of our area, arriving near the last of April and departing about the last of October.

I have had the privilege of studying an excellent series of specimens of this Wren, taken within our borders, and of comparing them with as good series of both the eastern and the western forms. The characteristics of the specimens from the Chicago Area were very constant and the differences between them and both the eastern and western forms was so marked that I believe Mr. Ridgway's diagnosis of the species (see Bull. U. S. Nat. Mus. no. 50, pt. III, 489-499) is more satisfactory than any other arrangements of the various forms. I have, therefore, used his subspecific name *iliacus*.

Mr. Ridgway recognizes seven distinct forms of this species, of which the eastern form (*Telmatodytes palustris palustris*) ranges westward to western New York and Pennsylvania and south, in winter, to North and South Carolina. The western form (*Telmatodytes palustris plesius*) frequents the Rocky Mountain plateau district of the United States and British Columbia west to the middle of Washington and Oregon; south during its migration into Lower California and central Texas. Three other forms frequent only the coast districts of the southern United States, and one only the Pacific coast districts.

Mr. Ridgway gives the following range for the form which frequents our region: "Great Plains and prairie districts of Central United States and south-central British Provinces; north to Alberta and, probably, to Manitoba; east to Illinois and western Indiana; southward in winter over the greater part of Mexico (except northwestern portion) as far as Vera Cruz, Zacatecas, and eastern Jalisco, and along Gulf coast of United States to western Florida, casually to South Carolina, North Carolina and Virginia.

FAMILY CERTHIDÆ: CREEPERS.

Genus **CERTHIA** Linnæus, 1758.

Certhia familiaris americana (Bonaparte). **Brown Creeper.**

Certhia familiaris WILSON, Amer. Orn., I, 1808, 122, pl. 7, fig. 1.

Certhia americana BONAPARTE, Geog. and Comp. List, 1838, 11.

Certhia familiaris var. *americana* RIDGWAY, Bull. Essex Inst., V, 1873, 180.

Popular synonym: AMERICAN TREE CREEPER.

The Brown Creeper is a common migrant, and an occasional winter resident within our limits at Millers, Indiana, where it finds shelter in the heavy growth of pines among the sand hills. The majority of these birds arrive, in the spring, early in April and remain until about the middle of May. They return, in the fall, the latter part of September and the first half of October. Regarding the Brown Creeper, Mr. E. W. Nelson said (1876): "Common winter resident, arriving October 1st and remaining until May 10th. Particularly abundant the first two weeks of October and of April, when they frequent the streets of Chicago in large numbers, industriously searching the rough brick walls for the small spiders which they find in abundance in the numerous crevices."

The range of the Brown Creeper covers eastern North America, from the Gulf of Mexico northward. It breeds from the northern and more elevated portions of the United States northward, and casually further south. It winters in the southern portion of its range.

FAMILY SITTIDÆ: NUTHATCHES.

Genus **SITTA** Linnæus, 1758.

Sitta carolinensis Latham. **White-breasted Nuthatch**

Sitta carolinensis LATHAM, Ind. Orn., I, 1790, 262.

Popular synonyms: WHITE-BELLIED NUTHATCH. TOMTIT. BLUE SAP-SUCKER.

The White-breasted Nuthatch is a not uncommon resident in the northern portion of our area. It is, however, more abundant during its migrations. The majority of these Nuthatches arrive, in the spring, early in April, and depart, in the fall, during the month of October.

The range of this species covers the United States, east of the Rocky Mountains, and from the British Possessions (New Brunswick and Ontario) southward to the Gulf States and Texas. It is a resident species nearly throughout its range.

Sitta canadensis Linnæus. **Red-breasted Nuthatch.**

Sitta canadensis LINNÆUS, S. N., ed. 12, I, 1766, 177.

Popular synonyms: RED-BELLIED NUTHATCH. CANADA NUTHATCH. SAPSUCKER.

At the present time we only know this Nuthatch as a common migrant, arriving in the spring, from early in April to the middle of May, and returning, in the fall, from the latter part of August to early in September; it may remain in our vicinity until the latter part of October. It is probable that this species is also an occasional winter resident, for Mr. J. Grafton Parker, Jr., took a specimen at Lake Forest, Illinois, on December 15, 1894; and Mr. Amos W. Butler says in his "Birds of Indiana" that Mr. Aiken reported these birds to be very abundant in Cook County, Illinois, during the winter of 1866-1867. The only record of its nesting within our limits is that of Mr. E. W. Nelson, who says:* "A rare summer resident. I found a pair near Chicago with full grown young the first of July, and Mr. Rice observed a pair feeding unfledged young the last of April, 1874, at Evanston, Illinois. The excavation containing this nest was in a tree, standing on one of the principal streets of the town. It was about twenty feet from the ground. The young were thrusting their heads out of the hole and clamoring for food, thus attracting his attention when they would otherwise have been unnoticed."

The range of the Red-breasted Nuthatch covers North America in general, northward to the limit of timber and southward, in winter, to the southern border of the United States. It breeds from the northern portions of the United States northward, and southward in the Alleghany, Rocky, and Sierra Nevada Mountains.

FAMILY PARIDÆ: TITMICE AND CHICKADEES.

Genus **BÆOLOPHUS** Cabanis, 1850.

Bæolophus bicolor (Linnaeus). Tufted Titmouse.

Parus bicolor LINNÆUS, S. N., ed. 12, I, 1766, 340.

Bæolophus bicolor CABANIS, Mus. Heid., I, 1850, 91.

Lophophanes bicolor BONAPARTE, Consp. Av., I, 1850, 228.

Popular synonym: BLACK-FRONTED TITMOUSE.

While the Tufted Titmouse is common in the southern part of Illinois, it is certainly no more than a very casual visitant to our area. Mr. J. Grafton Parker, Jr., observed one of these birds at South Chicago on October 15, 1897, and it is not uncommon during the fall and winter months at Kouts, Indiana, sixty miles southeast of Chicago. Mr. O. M. Schantz informs me that early

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 96.

in the spring of 1900, before the trees were in leaf, he saw a large flock of Tufted Titmice in the woods west of Riverside, Illinois. Mr. E. W. Nelson says* that it "occurs only during fall and winter, when straggling parties occasionally visit us from southern Illinois, where it is one of the characteristic species."

The range of this species covers the United States east of the Great Plains, and from the Connecticut Valley and southern Michigan southward. It is usually resident and breeds throughout its range.

Genus **PENTHESTES** Reichenbaeh, 1850.

Penthestes atricapillus (Linnæus). **Chickadee.**

Parus atricapillus LINNÆUS, S. N., ed. 12, I, 1766, 341.

Popular synonyms: BLACK-CAPPED TITMOUSE or CHICKADEE. EASTERN or NORTHERN CHICKADEE.

The Chickadee is a common resident, but is more common during its migrations and in winter.

The range of this species extends over Northeastern North America, east of the Great Plains, and from the mountains of North Carolina, the Ohio Valley and Missouri northward. It breeds quite throughout its range.

Penthestes carolinensis (Audubon). **Carolina Chickadee.**

Parus carolinensis AUDUBON, Orn. Biog., II, 1834, 341, pl. 160.

Popular synonyms: CAROLINA TITMOUSE. SOUTHERN CHICKADEE.

The only records I have of the occurrence of this pretty and active bird within our limits are the following: Mr. E. W. Nelson says* that it is "a rare summer visitant to the 'Pinery,' at the southern end of Lake Michigan." Mr. J. Grafton Parker, Jr., obtained a specimen of this diminutive Chickadee at Lake Forest, Illinois, in December, 1890.

The range of this species includes the Southeastern United States, north to New Jersey and Illinois, and west to eastern Texas, the Indian Territory, and Missouri.

Penthestes hudsonicus (Forster). **Hudsonian Chickadee.**

Parus hudsonicus FORSTER, Phil. Trans., LXII, 1772, 383, 430.

Parus hudsonicus NELSON, Bull. Essex Inst., VIII, 1876, 95.

Parus hudsonicus RIDGWAY, Birds of Illinois, I, 1889, 82.

The Hudsonian Chickadee may be regarded as a very rare winter visitant. There are but four records of its occurrence in

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 95.

Illinois, two of these being based on specimens actually secured. Mr. Nelson says: "A very rare winter visitant. Dr. Hoy observed a small flock near Racine in January, 1852; and Dr. Velie has since observed them at Rock Island, Illinois." Mr. Ridgway writes as follows: "This species can only be considered the merest straggler to the extreme northern portion of the State." On November 5, 1906, Mr. John F. Ferry obtained a specimen at Waukegan, Illinois, and on the eighth of the same month I secured two females at the same locality. These birds are the only specimens actually secured in the state.

The Hudsonian Chickadee ranges in North America from northern New England, New York and northern Illinois northward.

FAMILY SYLVIIDÆ: WARBLERS, KINGLETS. AND GNATCATCHERS.

Genus **REGULUS** Cuvier, 1799-1800.

Regulus satrapa Lichtenstein. **Golden-crowned Kinglet.**

Regulus satrapa LICHTENSTEIN, Verz. Doubl., 1823, 35.

Regulus crissatus NUTTALL, Man., I, 1832, 420.

Popular synonyms: **GOLDEN-CRESTED KINGLET** or **WREN. AMERICAN
GOLDEN-CREST. GOLDEN-CROWNED WREN.**

The Golden-crowned Kinglet is a common migrant, arriving, in the spring, from the last of March to the tenth of May, and returning, in the fall, from the first of October to the middle of November. Mr. Eliot Blackwelder reports having seen one of these birds on the first of December, which is an unusually late record.

The range of this species covers the whole of North America. It breeds in the northern and elevated portions of the United States and northward, and winters southward in the United States and through Mexico and Central America to Guatemala.

Regulus calendula (Linnaeus). **Ruby-crowned Kinglet.**

Motacilla calendula LINNÆUS, S. N., ed. 12, I, 1766, 337.

Regulus calendula LICHTENSTEIN, Verz. Doubl., 1823, 35.

Popular synonym: **RUBY-CROWNED WREN.**

The Ruby-crowned Kinglet is an abundant migrant, arriving, in the spring, from the fifth of April to the middle of May, and returning, in the fall, from the last of September to the last of October.

The range of this Kinglet includes the whole of North America, from the Arctic coast southward through the United States, and in winter south to Guatemala. It breeds chiefly north of the United States and also in the Rocky Mountains, the Sierra Nevada, and the mountains of Arizona.

Genus **POLIOPTILA** Selater, 1855.

Polioptila cærulea (Linnæus). **Blue-gray Gnatcatcher.**

Motacilla cærulea LINNÆUS, S. N., ed. 12, I, 1766, 337.

Sylvania cærulea NUTTALL, Man., ed. 2, I, 1840, 337.

Polioptila cærulea SCLATER, Proc. Zool. Soc., London, 1855, 11.

Popular synonyms: EASTERN GNATCATCHER. BLUE WREN. LONG-TAILED WREN.

The Blue-gray Gnatcatcher is a not uncommon migrant, arriving, in the spring, from the last of April to the last of May, and returning, in the fall, from the twentieth of August to the middle of September. It is also a rare resident. Mr. B. T. Gault informs me that it has been found breeding in the Addison Woods, DuPage County, Illinois. Mr. Amos W. Butler, in his Birds of Indiana, states on the authority of Mr. C. A. Tallman and Mr. Eliot Blackwelder, that it breeds in Cook County, Illinois. The lack of heavy timber within our limits is probably the reason that this species does not breed more extensively in our vicinity.

The range of the Blue-gray Gnatcatcher covers the United States east of Nebraska and western Texas and chiefly south of Latitude 43°. It breeds in suitable localities quite throughout its range, and migrates southward, in winter, as far as the West Indies and Guatemala. It has also been reported as far north as Ontario.

FAMILY TURDIDÆ: THRUSHES, BLUEBIRDS, ETC.

Genus **HYLOCICHLA** Baird, 1864.

Hylocichla mustelina (Gmelin). **Wood Thrush.**

Turdus mustelinus GMELIN, S. N., I, ii, 1788, 817.

Hylocichla mustelina RIDGWAY, Proc. U. S. Nat. Mus., III, August 27, 1880, 166.

Popular synonyms: WOOD ROBIN. BELL THRUSH. BELL BIRD.

This beautiful bird and sweet songster is a common summer resident, arriving, in the spring, the last of April and departing, in the fall, early in September. Because of its favorite haunts

which are in damp woodlands and shaded dells, the Wood Thrush, while common, is not, perhaps, a well known bird. Its rich and melodious song, however, once heard can never be forgotten, and it is by its song that the bird is best known, at least in rural districts. It is said that the mockingbird has never been able to imitate the beautiful harmony and liquid melody of the Wood Thrush's song.

The range of this Thrush covers the United States, east of the Great Plains, and the eastern and southern portions of the British Possessions. It breeds from Georgia and southern Missouri northward and winters from Florida and Texas southward.

***Hylocichla fuscescens* (Steph.). Wilson's Thrush.**

Turdus fuscescens STEPH., Gen. Zool., X, i. 1817, 182.

Turdus wilsonii BONAPARTE, Journ. Acad. Nat. Sci., Philadelphia, IV, 1824, 34.

Hylocichla fuscescens RIDGWAY, Proc. U. S. Nat. Mus., III, August 27, 1880, 166.

Popular synonyms: VEERY. TAWNY THRUSH.

Wilson's Thrush is a not uncommon migrant, arriving, in the spring, from the last of April to the last of May and returning in the fall from the middle to the last of August. Mr. Robert Kennicott records* this species as "common throughout the state," and also states that it is known to nest in Cook County, Illinois. Mr. E. W. Nelson says: "Rather rare summer resident. Arrives in small numbers the second week of May and departs the first of September." I have no authentic records of the eggs of this species having been taken within our area during recent years. Mr. J. Grafton Parker thinks that it may be a rare summer resident here.

The range of Wilson's Thrush extends through the United States east of the Great Plains and from Manitoba, Ontario and Newfoundland southward. It breeds from New Jersey and northern Indiana northward and in the Alleghany Mountains south to North Carolina. It winters to some extent in the southern states, but chiefly through Central America to Brazil.

***Hylocichla fuscescens salicicola* (Ridgway). Willow Thrush.**

Turdus fuscescens BAIRD, B. N. Amer., 1858, 922, 927 (Ft. Bridger, Wyoming).

Hylocichla fuscescens salicicola RIDGWAY, Proc. U. S. Nat. Mus., IV, April 6, 1882, 374.

Turdus fuscescens salicicola COUES, Key, ed. 2, 1881, 246.

Popular synonym: ROCKY MOUNTAIN VEERY.

*Trans. Illinois State Agri. Society, Vol. 1, 1853-1854, 582.

The Willow Thrush is a not uncommon migrant in suitable localities of our area. In the spring, it arrives from the last of April to the last of May, and returns, in the fall, from the last of August to the middle of September. The following are the records of the taking of this species within our limits, which are known to me, and they also indicate the localities where these birds may be found more frequently at the proper seasons:

On September 16, 1877, Mr. Henry K. Coale captured a specimen near Chicago. This is the first record of its occurrence in Illinois.

Mr. J. Grafton Parker, Jr., took a specimen at Grand Crossing, Illinois, on April 29, 1886. This was a male bird. He also captured two birds at Liverpool, Indiana, on May 5, 1894.

Mr. B. T. Gault captured a male of this species on the sixth and a female on the twenty-first of May, 1894, at Glen Ellyn, Illinois.

Mr. Frank M. Woodruff took this species at Evanston, Illinois, on April 27, 1896.

Mr. B. T. Gault also obtained a specimen in DuPage County, Illinois, on September 17, 1896.

Mr. Henry K. Coale obtained a specimen at Ravinia, Illinois, on May 17, 1890.

While the records mentioned show the actual taking of specimens, others have been seen in the same localities. It is well to bear in mind that this variety closely resembles pale specimens of *Hylocichla fuscescens*.

The range of the Willow Thrush as given in the A. C. U. Check-list of North American Birds (1895) is as follows: "Rocky Mountain region, north to British Columbia, east to Dakota, occasionally to Illinois, casually to South Carolina; in winter south to southern Brazil."

Hylocichla aliciae (Baird). **Gray-cheeked Thrush.**

Turdus aliciae BAIRD, B. N. Amer., 1858, 217.

Turdus swainsoni var. *aliciae* COUES, Key, 1872, 73.

Hylocichla aliciae RIDGWAY, Proc. U. S. Nat. Mus., III, August 27, 1880, 166.

Popular synonym: ALICE'S THRUSH.

The Gray-cheeked Thrush is an abundant migrant, arriving, in the spring, from the first to the last of May, and returning, in the fall, from the last of August to about the second week in October.

In its migrations, this Thrush passes through the United States, east of the Great Plains, northward to the Arctic coast, Alaska, and eastern Siberia; in winter it passes southward through Central America to Colombia. It breeds north of the United States.

***Hylocichla ustulata swainsoni* (Cabanis). Olive-backed Thrush.**

Turdus swainsoni CABANIS, Fauna Per., 1845-1846, 187.

Turdus ustulatus *B. swainsoni* RIDGWAY, Field and Forest, II, May, 1877, 195.

Hylocichla ustulata swainsoni RIDGWAY, Proc. U. S. Nat. Mus., III, August 27, 1880, 166.

Popular synonym: SWAINSON'S THRUSH.

The Olive-backed Thrush is an abundant migrant, arriving, in the spring, from the last of April to the last of May, and returning, in the fall, from the first of September to the middle of October. Mr. E. W. Nelson thought it possible that this species might be a rare summer resident. He says:* "I obtained a specimen near Chicago, June 7, 1873, and July 9, the same year, Mr. Rice obtained a second specimen."

The range of the Olive-backed Thrush covers America from Brazil and Peru through North America, east of the Great Basin, to Labrador and Alaska; it is also found as a straggler on the Pacific coast. It breeds in the mountainous portions of the north-eastern United States, northward from Pennsylvania, in the southern Sierra Nevadas and northward through the Rocky Mountains and in British America.

***Hylocichla guttata pallasii* (Cabanis). Hermit Thrush.**

Turdus pallasii CABANIS, Archiv. f. Naturg., 1847, 1, 205.

Turdus aonalaschka pallasii RIDGWAY, Proc. U. S. Nat. Mus., III, March 27, 1880, 1.

Hylocichla aonalaschka pallasii RIDGWAY, Proc. U. S. Nat. Mus., III, August 27, 1880, 166.

Hylocichla guttata pallasii FAXON and ALLEN, Birds Berkshire Co., Massachusetts, 1900, 9.

Popular synonyms: RUFUS-TAILED THRUSH. SWAMP ROBIN. SOLITARY THRUSH. EASTERN HERMIT THRUSH.

The Hermit Thrush is an abundant migrant, arriving, in the spring, from the first of April to the twentieth of May, and returning, in the fall, from the middle of September to the last of October.

The range of this species covers eastern North America from the Gulf of Mexico northward. It breeds from northern Michi-

*Birds of Northeastern Illinois, Bull. of the Essex Institute, Vol. VIII, 1876, 93.

gan, southern New York, the northern portion of the Alleghany Mountains and the mountainous regions of New England northward. It winters chiefly south of latitude 40°.

Genus **MERULA** Leach, 1816.

Merula migratoria (Linnæus). **American Robin.**

Turdus migratorius LINNÆUS, S. N., ed. 12, I, 1766, 292.

Merula migratoria SWAINSON, Phil. Mag., I, 1827, 368.

Popular synonyms: ROBIN. ROBIN RED-BREAST. ROBIN THRUSH. MIGRATORY THRUSH. RED-BREASTED THRUSH. AMERICAN FIELD-FARE. REDBREAST.

The American Robin is an abundant summer resident, arriving early in April, and departing in October.

The range of the Robin covers North America, east of the Rocky Mountains and from Hudson Bay and Alaska southward to eastern Mexico. It breeds from Virginia and Kansas northward to the Arctic coast, and winters from southern Canada and the Northern States (irregularly) southward.

Genus **SIALIA** Swainson, 1827.

Sialia sialis (Linnæus). **Bluebird.**

Motacilla sialis LINNÆUS, S. N., ed. 10, I, 1758, 187.

Ampelis sialis NUTTALL, Man., I, 1832, 444.

Sialia sialis HALDEM., Trego's Geog. Penn., 1843, 77.

Popular synonym: EASTERN BLUEBIRD.

The Bluebird is a common summer resident, arriving from the last of February to the first of May, and departing usually during the latter half of September and the first half of October.

The range of the Bluebird extends east of the Rocky Mountains, from Manitoba, Ontario, and Nova Scotia southward. It breeds from the Middle States northward, and winters southward to the Gulf of Mexico and Cuba. It is also resident in Bermuda.

BIBLIOGRAPHY.

While I believe the following bibliography of books and articles relating to the birds of our area to be quite complete, I realize that there may be a number of articles which have been published in magazines and in the newspapers of Chicago that have escaped my attention. Those which are mentioned have been consulted by the author.

ABBOT, GIRARD ALAN.

- '03. Habits of the American Crow. *Birds and Nature*, Vol. XIII, No. 5, p. 216. May, 1903.
- '03A. Nesting of the Florida Gallinule. *Birds and Nature*, Vol. XIV, No. 1, p. 26. June, 1903.
- '03B. Nesting of the Least Bittern. *Birds and Nature*, Vol. XIV, No. 2, p. 71. September, 1903.
- '03C. Habits of the Killdeer Plover. *Birds and Nature*, Vol. XIV, p. 170. November, 1903.
- '03D. Our Old Acquaintance, the Crow. *The Truth-Seeker*. November 14, 1903. Page 132.
- '04. The Lesser Scaup. *Birds and Nature*, Vol. XV, No. 2, p. 59. February, 1904.
- '04A. Wilson's Snipe. *Birds and Nature*, Vol. XV, No. 2, p. 62. February, 1904.
- '05. "Nesting of the Woodcock." *Bulletin Mich. Ornithological Club*, p. 10. March-June, 1905.

ALLEN, J. A.

- '75. Notes on the Sharp-Tailed Finch. *Proc. Bost. Soc. Nat. Hist.*, XVII, p. 292. March, 1875.

AMERICAN ORNITHOLOGISTS' UNION.

- '95. Check-List of North American Birds.

ANONYMOUS.

- '95. Winter Ducks and Gulls in Lincoln Park, Chicago. *The Chicago Daily Inter Ocean*, February 18, 1895.
- '96. In a Bird Store. *Chicago Tribune*, March 28.
- '96A. Protecting the Birds. *Chicago Record*, October 5.
- '96B. Tragedy in the Home of the Owls. *Chicago Tribune*, November, 10.
- '97. Our Ocean Visitors. *Chicago Evening Post*, February 27.
- '97A. Chicago as a Winter Resort for Birds. *Chicago Tribune*, March 7.
- '97B. Pearls in Stomach of a King Rail. *Chicago Tribune*, April 2.
- '97C. Hatched a Brood of Ducks on Wooded Island. *Chicago Record*, May 2.
- '97D. Sparrows choose queer Homes. *Chicago Daily News*, May 14.
- '97E. Robins make nest on Tombstone in Graceland Cemetery. *Chicago Daily News*, June 6.
- '97F. Adds a Flock of Connecting Links. *Lincoln Park Palm House* has a decidedly novel attraction, consisting of fifteen Rails. *Chicago Daily News*, June 20.

- '97G. Heron and Blue Jays Fight. Lincoln Park the scene of lively battle among Birds. Chicago Daily News, September 10.
- '98. To Plant More Quail. Chicago Daily News, February 16.
- '98A. Queer Nest made by two Sparrows, in stirrup of Grant Monument in Lincoln Park. Chicago Tribune, June 19.
- '98B. Juliet leaves Romeo. Sad falling out of two Sandhill Cranes in Lincoln Park. Chicago Tribune, September 11.
- '98C. Bald Eagle shot, then lassoed in Chicago. Chicago Tribune, October 11.
- '98D. Great Day for Ducks—vast flocks in Lincoln Park. Chicago Tribune, October 15.
- '98E. Duck Hunters Find Good Sport about Lakes Calumet and George. Chicago Tribune, October 29.
- '98F. Birds Pass Across Moon. Chicago Tribune, November 13.
- '99. Wild Ducks in Garfield Park. Chicago Daily News, January 17.
- '99A. Study of Bird Migration. Chicago Tribune, April 10.
- '99B. Cook County Birds. Chicago Evening Post, May 13. Mentions collection of Mr. George Clinean.
- '99C. Birds to Sing for Prizes. Chicago Tribune, August 9.
- '99D. Bird Congress in Jackson Park. Chicago Daily News, August 20.
- '99E. Southward Migration of Warblers, Swallow's early flight. Chicago Tribune, October 9.
- '99F. Our Ocean Visitors. Chicago Evening Post, December 8.
- '00. Kill for Love of Slaughter. Many White-winged Crossbills and Old Squaws wantonly killed. Chicago Tribune, February 3.
- '00A. City Birds in Winter Time. Chicago Tribune, February 4.
- '00B. See Wild Geese Fly North. Chicago Tribune, March 14.
- '00C. Bird Braves Switch Engine. Chicago Tribune, May 5.
- '00D. Useful English Sparrows. Chicago Daily News, July 7.
- '00E. To Protect the Wild Birds. Chicago Tribune, October 17.
- '00F. Lincoln Park is visited by fifty Canada Geese which mingle with the captive birds until 8 A. M., when they depart. Chicago Daily News, October 17.
- '00G. Rhode Island Audubon Society car placard to be tried in Chicago. Chicago Tribune, December 1.
- '01. Chicago abounds in Birds. Chicago Tribune, March 24.
- '01A. A flock of Pigeons have rendezvous on one of the windows in Judge Carter's Court Room, in County Building. Chicago Daily News, April 16.
- '01B. Pelican amuses Park crowd. Chicago Daily News, August 8.
- '01C. Lincoln Park Officers to resist game warden. Atty. Frank Hamlin advises the Board is authorized by Law to keep all kinds of Birds in Zoo. Chicago Tribune, August 24.
- '01D. Records of Fast Flying Pigeons. There are some birds in Chicago that can beat ordinary wind. Chicago Daily News, September 5.
- '01E. No Lack of Game within City Limits. Chicago Tribune, September 15.
- '01F. Reason clad in Feathers. Chicago Tribune, October 20.
- '02. Robins sing Spring is Here. Chicago Tribune, April 6.
- '02A. Chicago one of the best places in the country for Bird Study. Chicago Daily News, May 9.
- '02B. Return of the Birds to Chicago. Chicago Tribune, May 12.
- '02C. Southside haunts of birds favorite spots on the Wooded Island. Chicago Tribune, June 11.

BAKER, FRANK COLLINS.

- '97. Collecting about Chicago. Sports Afield, Vol. XIX, No. 2, p. 112.
- '97A. Same Title. The Museum, Vol. III, No. 10, August.

BALLOU, WILLIAM HOSEA.

- '80. Nesting English Sparrows. Amer. Nat., Vol. XIV, p. 524.
- '80A. Bird Arrivals at Evanston, Illinois. Amer. Nat., Vol. XIV, July, p. 525.
- '80B. Theory of Bird Migration. Amer. Nat., Vol. XIV, July, p. 527.

BEAL, F. E. L.

- '86. Some Notes on Bird Migration. Amer. Nat., Vol. XX, September, p. 817; Ibis, Vol. V, January, 1887, p. 121.

BLACKWELDER, ELIOT.

- '97. Notes on Occurrence of Smith's Longspur. Osprey, January, p. 67.

"W. R."—BREWSTER, WILLIAM.

- '77. Nelson's Birds of Northeastern Illinois. Bull. Nutt. Orn. Club, Vol. II, July, 1877, pp. 68, 69. (Synopsis of E. W. Nelson's article in the Bulletin of the Essex Institute, Vol. VIII, 1876.)

BUTLER, AMOS W.

- '90. Report on the Birds of Indiana. Ind. Hort. Soc., pp. 1-135.
- '91. Notes on Indiana Birds. Proc. Ind. Acad. Sci., pp. 164-166.
- '92. The Range of the Crossbill in the Ohio Valley, with Notes on Their Unusual Occurrence in Summer. Proc. Ind. Acad. Sci., pp. 63-72.
- '93. Bibliography of Indiana Ornithology and Notes on Indiana Birds. Proc. Ind. Acad. Sci., pp. 108-120.
- '95. Additional Notes on Indiana Birds. Proc. Ind. Acad. Sci., p. 162.
- '97. Birds of Indiana. Ind. Dep't. Geol. and Nat. Resources, 22nd Ann. Rep't., 1897, pp. 515-1188.
- '97A. The Unusual Occurrence of Brunich's Murre (*Uria lomvia*) far Inland with Notes on other Rare Birds. Auk, Vol. XIV, 1897, pp. 197-200.

CHASE, MRS. AGNES.

- A Chicago Park Horizon. The Wilson Bulletin, No. 26, N. S., Vol. VI, No. 3, p. 40.
- The Herring Gull (*Larus argentatus*). The Wilson Bulletin, No. 42, N. S., Vol. X, No. 1, pp. 38-39.

CLARK, EDWARD BRAYTON.

- '94. "City Birds in Winter Time." Chicago Tribune, January 20, 1894.
- '94A. "Mr. Shrike is Here." "A Chapter on the Great Northern Shrike. A Chicago Winter Visitor." Chicago Tribune, November 4, 1894.
- '94B. "The Last of his Race." Passenger Pigeon takes refuge in Lincoln Park. Chicago Tribune, November 25, 1894.

- '94C. "Is a Royal Fisher." Story of a Lincoln Park Kingfisher. Chicago Tribune, December 16, 1894.
- '95. "Storm Blown Birds." Afield in Lincoln Park, Ravenia, Highland Park. Chicago Tribune, March 24.
- '95A. "Old Alcyon is Dead." Lincoln Park's favorite Kingfisher commits suicide. Chicago Tribune, September 15.
- '96. "Linger in Winter's Lap." An account of birds which that year delayed their migration. Chicago Tribune, January 10, 1897.
- '96A. "Illinois' Rally to Save Her Birds." Chicago Inter Ocean, April (?), 1897.
- '96B. "Our Bird Visitors in City Parks." Chicago Inter Ocean April (?), 1897.
- '96C. "Snap Shots at Birds." A study of the birds at Worth, Illinois. Chicago Tribune, May (?), 1896.
- '96D. "Linger in Winter's Lap." Chicago Tribune, December 5.
- '98. "Odd Deaths of Birds." Local stories of bird tragedies. Chicago Tribune, April 24, 1898.
- '99. "Birds as Harbingers of Spring." A chapter on spring birds at Highland Park, Illinois. Chicago Chronicle, April 16, 1899.
- '99A. "Some Wise Birds and Foolish." Local studies in nest building. Chicago Tribune, May 28, 1899.
- '99B. "Man's Life is Saved by a Bird." A study of the insect eating of birds. Chicago Tribune, July 30, 1899.
- '99C. "Midsummer in the Parks." Nature sketches in Chicago parks. Chicago Tribune, August 20, 1899.
- '99D. "Birds in the Cemetery." Notes on the birds in Graceland Cemetery. Chicago Chronicle, August (?), 1899.
- '00. Evening Grosbeaks in Graceland. Chicago Record, April 28, 1900.
- '00A. "Birds Deck Fall Hats." A millinery study. Chicago Tribune, October (?), 1900.
- '00B. "Bird Preparations for Winter." Chicago Tribune, November 11, 1900.
- '01. "The Unspeakable Sparrow." Outing, January, 1901.
- '01A. "Birds That Use Chicago as a Winter Resort." Chicago Tribune, February 17, 1901.
- '01B. "Birds Sing Spring In." Chicago Post, March 23, 1901. Spring bird notes.
- '01C. "Song Bird Has Arrived." Spring arrivals along Des Plaines River. Chicago Post, April 20, 1901.
- '01D. "Return of the Birds to Chicago." Chicago Tribune, May 5, 1901.
- '01E. "Plumed Friends of Man." A plea for the birds. Chicago Chronicle, May (?), 1901.
- '01F. "Billy the Kingfisher." A Lincoln Park bird. Chicago Record, June 15, 1901.
- '01G. "A Bit of Bird Life." Local bird sketch. Chicago Post, October 19, 1901.
- '02. "Feathered Winter Visitors in Chicago." Chicago Tribune, January 12, 1902.
- '02A. "Birds of Mystery at Lake Forest." Notes on Evening Grosbeak visitors. Chicago Tribune, April, 1902.
- '02B. Hawks serve farmer, few chicken eaters. Chicago Record-Herald, August 12, 1903.

"English Oppressors of the Bird World." Date lost. A study of the persecution of native birds by the English Sparrow. Chicago Times-Herald.

CLARK, H. WALTON.

- '04. The Screech Owl. Birds and Nature, Vol. XVI, p. 225, December, 1904.

COALE, HENRY K.

- '77. Junco oregonus in Illinois. Bull. Nutt. Orn. Club, Vol. II, July, 1877, p. 82.
'83. The Willow Thrush and Holboll's Linnet in Illinois. Bull. Nutt. Orn. Club, Vol. VIII, October, 1883, p. 239.
'85. Krider's Hawk in Northeastern Illinois. The Auk, Vol. II, 1885, p. 110.
'94. Willow Thrush in Northeastern Illinois. The Auk, Vol. XI, July, 1894, p. 222.

COOKE, WELLS W.

- '88. Bird Migration of the Mississippi Valley in the Years 1884-1885. Bull. No. 2, U. S. Dep't. of Agri. Div. of Econom. Orn., 1888, p. 314.
'04. On Migration of the Hooded Warbler. Bird Lore, Vol. VI, No. 1, January-February, 1904, p. 22.
'04A. Migration of Warblers. Bird Lore, Vol. VI, No. 2, April, 1904, pp. 57-60.
'04B. Distribution and Migration of North American Warblers. Bull. No. 18, U. S. Dep't. of Agri. Div. Biol. Surv., 1904, p. 142.

CRAIGMILLE, ESTHER A.

- '04. The New Year Bird Census. Wilson Bull., No. 46, N. S., Vol. XI, No. 1, March, 1904, pp. 19-20.
'04A. A Summer Porch List at Hinsdale, Illinois. Wilson Bull., No. 49, N. S., Vol. XI, No. 4, December, 1904, p. 105.

DEANE, RUTHVEN.

- '88. Destruction in Migration. Forest and Stream, Vol. XXI, p. 385, December, 1888.
'95. Additional Notes on the Passenger Pigeon in Illinois and Indiana. The Auk, Vol. XII, January, 1895, p. 98.
'95A. Additional Records of Passenger Pigeon in Illinois and Indiana. The Auk, Vol. XII, July, 1895, p. 298.
'95B. Additional Notes on the Passenger Pigeon in Illinois and Indiana. The Auk, Vol. XII, July, 1895, p. 300.
'99. Report of Illinois Audubon Society. Bird Lore, Vol. 1, No. 2, p. 66, April, 1899.
'03. Richardson's Owl in Illinois. The Auk, Vol. XX, July, 1903, p. 305.
'03A. Richardson's Owl in Illinois. The Auk, Vol. XX, October, 1903, p. 433.
'05. Additional Record of the European Widgeon. Auk, Vol. XXII, p. 76, January, 1905.

DRUMMOND, MARY.

- '00. Report of Illinois Audubon Society. Bird Lore, Vol. II, No. 2, p. 65, April, 1900.
- '02. Report of Illinois Audubon Society. Bird Lore, Vol. IV, No. 4, p. 136, July-August, 1902.

DUNN, JAMES O.

- '95. Notes on some Birds of Northeastern Illinois. The Auk, Vol. XII, October, 1895, pp. 393-395.

EVERMANN, B. W.

- '87. Some Rare Indiana Birds. Amer. Nat., Vol. XXI, p. 290, March, 1887.

GAULT, BENJAMIN TRUE.

- '89. Lapland Longspur at Chicago in June. The Auk, Vol. V, 1889, p. 278.
- '94. Kirtland's Warbler in Northeastern Illinois. The Auk, Vol. XI, 1894, p. 258.
- '95. The Passenger Pigeon in Northeastern Illinois. The Auk, Vol. XII, 1895, p. 80.
- '95A. The Willow Thrush. The Auk, Vol. XII, 1895, p. 85.
- '96. Recent Occurrence of the Turkey Vulture and Bald Eagle in Cook County, Illinois. The Wilson Bulletin, No. 9, July 30, 1896, p. 3-4.
- '96A. The Pine Siskin. The Wilson Bulletin, No. 11, p. 8, Nov. 30, 1896.
- '97. Unusual Winter Visitors in DuPage County, Illinois. The Wilson Bulletin, No. 12, p. 10 (Meadowlarks in January), January 30, 1897.
- '97B. Short Notes: The Red Crossbill. The Wilson Bulletin, No. 13, N. S., Vol. IV, No. 2, March 30, 1897, p. 20.
- '98. Some Bird Ways. The Wilson Bulletin, No. 23, N. S., Vol. V, No. 6, November 30, 1898, p. 73-75.
- '99. December Horizons at Glen Ellyn, Illinois. The Wilson Bulletin, No. 24, Vol. VI, No. 1, January 30, 1899, p. 5-6.
- '99A. Summer Horizons. The Wilson Bulletin, No. 28, N. S., Vol. VI, No. 5, September 30, 1899, p. 65.
- '00. A Correction. The Wilson Bulletin, No. 3, Vol. VII, N. S., July 30, 1900, p. 9.
- '00A. The American Redstart. Birds and Nature, Vol. VIII, No. 3, October, 1900.
- '00B. Bird Life at Glen Ellyn (near Chicago) Illinois. Bird Lore, Vol. II, No. 6, p. 187, December, 1900.
- '01. Ibid. Bird Lore, Vol. III, No. 1, p. 26, February-March, 1901; No. 2, p. 65, April-May; No. 3, p. 102, June-July; No. 4, p. 166, August-September, 1901.
- '01A. The Christmas Bird Census at Glen Ellyn, Illinois. Bird Lore, Vol. III, p. 32, 1901.
- '02. Food Habits of the Wilson's Snipe. The Wilson Bulletin, No. 38, Vol. IX, No. 1, March, 1902, p. 7.
- '02A. Song Sparrow. The Wilson Bulletin, No. 38, Vol. IX, No. 1, March, 1902, p. 15.

GOODRICH, JULIET T.

- '05. Fifth Christmas Census. Bird Lore, Vol. VII, No. 1, p. 30, January-February, 1905.

HANCOCK, JOSEPH L.

- '83. Albino Cowbird. Ornith. & Oölog., March, p. 24.
'83A. Parkman's Wren in Illinois. Bull. Nutt. Orn. Club, Vol. VIII, July, 1883, p. 79.
'88. Impeded Migration and Destruction of Birds at Chicago. The Auk, Vol. V, 1888, pp. 432-434.

HOLLISTER, N. and KUMLIEN, L.

- '03. The Birds of Wisconsin. Bull. Wis. Nat. Hist. Soc., N. S., III, Nos. 1, 2, 3, January to July, 1903.

HOUGH, E.

In "Chicago and the West," as follows:

- '88. Wild Geese. Vol. XXXI, p. 325, November 15.
'88A. Ducks and Blackbirds, l. c., p. 365, November 29.
'88B. Ducks, l. c., p. 408, December 13.
'89. Arrival of Ducks, Vol. XXXII, p. 44, February 7.
'89A. Bluebills and Redheads, l. c., p. 213, April 4.
'89B. Woodcock and Plover, l. c., p. 491, July 4.
'89C. Prairie Chickens in Morgan Park, Vol. XXXIII, p. 86, August 22.
'89D. Bluebills and Redheads in Chicago, l. c., p. 366, August.
'90. Yellowlegs at Lake Calumet, Vol. XXXV, p. 69, August 14.
'90A. Wild Geese at Chicago, l. c., p. 432, December 18.
'90B. Redheads at Calumet Heights, l. c., p. 456, December 25.
'91. Pintails and Sawbills on Lake Michigan, Vol. XXXVI, p. 45, February 5.
'91A. Bluebills and Canvasbacks in Calumet Lake, l. c., p. 150, March 12.
'92. Ruffed Grouse at Hinsdale, Vol. XXXVIII, p. 53, January 21.
'92A. Bluebills at Harrison Street Bridge, l. c., p. 322, April 7.
'92B. Snow Buntings sold as Reed Birds, l. c., p. 349, April 14.
'92C. Jacksnipe at Hammond, Indiana, Vol. XXXIX, p. 138, August 18.
'92D. Bald Eagle killed at Calumet Heights, l. c., p. 469, December 1.

In "Forest and Stream," as follows:

- '93. Canvasback Ducks in Calumet Lake, Vol. XL, p. 253, March 23.
'94. Jacksnipe at Calumet Lake, Vol. XLIII, p. 292, October 6.
'95. Jacksnipe on Desplaines River, Vol. XLV, p. 317, October 12.
'96. Jacksnipe at Blue Island, Vol. XLVI, p. 316, April 18.
'96A. Duck Shooting at Calumet Heights, Vol. XLVII, p. 368, November 7.
'96B. Flight of Ducks at Calumet Heights, l. c., p. 409, November 21.
'96C. Acclimating Quail at Calumet Heights, Vol. XLVII, p. 467, December 12.
'97. Cook County Birds at Academy of Sciences, Vol. XLVIII, p. 148, February 20.
'97A. Jacksnipe at Arlington Heights, l. c., p. 367, May 8.

- '97B. Raven and Snowy Owl at Calumet Heights, Vol. XLIX, p. 401, November 20.
- '98. Deep Water Ducks at Calumet Heights, Vol. L, p. 185, March 5.
- '98A. Jacksnipe at Chicago, l. c., p. 216, March 26.
- '98B. Golden Plover at Summit, l. c., p. 387, May 11.
- '99. Jacks at Hyde Lake and Lake Station, Indiana, Vol. LIII, p. 247, September 23.
- '00. Canvashacks in Lake Michigan, Chicago, Vol. LIV, p. 167.
- '00A. Canada Goose at Calumet Heights, L. C., p. 249, March 31.
- '00B. Great Year for Ducks. Chicago Tribune, April 1.
- '00C. Jacksnipe at the Sag, Forest and Stream, Vol. LIV, p. 328, April 28.
- '00D. Art of Goose Shooting. Chicago Tribune, October 1.
- '00E. Marshes full of Snipe, l. c., October 1.
- '00F. Start of Quail Season, l. c., November 1.
- '00G. Habits of Ruffed Grouse. Chicago Tribune, November 1.
- '00H. Quail and Ruffed Grouse at Calumet Heights, Forest and Stream, Vol. LV, p. 405, November 24.
- '01. Early Shooting Season. Chicago Tribune, April 2.
- '01A. Defect in the Quail Law; no Protection in Illinois for Quail or Woodcock. Chicago Tribune, July 10.
- '01B. Teal at Tolleston, Forest and Stream, Vol. LVII, p. 285, October 12.
- '02. Wild Geese at Skokie Marsh, l. c., Vol. LVIII, p. 229, March 22.
- '02A. Mallards at Tolleston, l. c., p. 250, March 29.
- '02B. Jacksnipe at Tolleston, l. c., Vol. LIX, p. 268, October 4.
- '03. Jacksnipe at Calumet Heights, l. c., LX, p. 269, April 4.
- '03A. Jacksnipe at Calumet Heights, l. c., p. 397, April 18.

HOWEY, JOHN M.

- '83. Bobolinks in Northern Illinois. Ornith. and Oölog., February, p. 15.

HUNTER, HARRY.

- '82. Wild Pigeons at Highland Park. Forest and Stream, Vol. XLIII, p. 71, February.

JONES, LYND.

- '00. Horizons. Wilson Bulletin, N. S., Vol. VII, No. 33, p. 36, October.

KENNICOTT, ROBERT.

- '55. Catalogue of Animals Observed in Cook County, Illinois, Trans. Ill. State Agri. Soc., Vol. 1, 1853-1854, pp. 580-589.

"KORAX."

- '90. Yellow Rail in Chicago. Forest and Stream, Vol. XXXV, p. 431, December.

KUMLIEN, L. and HOLLISTER, N.

- '03. See Hollister, N.

MARBLE, C. C.

- '97. The Loggerhead Shrike. Birds and Nature, Vol. II, p. 202, June.

- '00. The Yellow Headed Blackbird. Birds and Nature, Vol. VII, p. 12, January.

NELSON, E. W.

- '76. Additions to the Avifauna of Illinois with Notes on other Species of Illinois Birds. Bull. Nutt. Orn. Club. Vol. I, No. 2, July, 1876, pp. 39-44.
'76A. Birds of Northeastern Illinois. Bull. of the Essex Institute, Vol. VIII, December, 1876, pp. 90-155.

RIDGWAY, ROBERT.

- '74. Catalogue of the Birds Ascertained to Occur in Illinois. Ann. Lyc. Nat. Hist. New York, Vol. X, January, pp. 364-394.
'81. Revised Catalogue of the Birds Ascertained to Occur in Illinois. Ill. State Lab. Nat. Hist., Bull. No. 4, pp. 163-208.
'89-'95. The Ornithology of Illinois. Nat. Hist. Surv. Ill., State Lab. Nat. Hist., Vol. I, 1889, pp. 120+VIII, pls. XXXII; Vol. II, pp. 282, pls. XXXIII.
'01-'04. The Birds of North and Middle America. Bull. U. S. Nat. Mus., No. 51, part I, 1901; part II, 1902; part III, 1904.
Ridgway Ornithological Club, Chicago. Notices of Meetings as follows in the Ibis: Vol. II, July, p. —, 1884; Vol. III, January, p. 120, 1885; Vol. III, April, p. 237, 1885; Vol. III, July, p. 330, 1885; Vol. V, January, p. 122, 1887; Vol. V, October, p. 466, 1887.

SCHANTZ, ORPHEUS M.

- '04. A Dooryard List from Morton Park, Illinois. Wilson Bulletin, No. 47, N. S., Vol. XI, No. 2, June, p. 57.

SCHANTZ, O. M. and MRS.

- '05. July Horizons at Morton Park, Illinois. Wilson Bulletin, No. 52, N. S., Vol. XII, No. 1, September.

SHARPE, R. BOWDLER.

- '85. Catalogue of the Passeriformes or Perching Birds in the Collection of the British Museum, etc. Vol. X, London, 1885, p. 305. (Lists a skin of *Geothlypis macgillivrayi* from Chicago, collected by Henry K. Coale—an adult female bird.)

TOPPAN, GEORGE.

- '87. Spring Migration Notes for Cook and Lake Counties, Illinois and Lake County, Indiana. Ibis, Vol. V, p. 122, January. Mentions meeting of Ridgway Ornithological Club of Chicago.

THURBER, COLLINS.

- '05. The Hermit Thrush. Birds and Nature, Vol. XVIII, No. 2, p. 50, September.
'05A. The Yellow Bellied Sapsucker. Birds and Nature, Vol. XVIII, No. 3, p. 119, October.

TURTLE, RICHARD.

- '02. Capture of Hudsonian Curlew. American Field, p. 221, September 1.

WALTER, HERBERT EUGENE and ALICE HALL (WALTER).

- '05 Wild Birds in City Parks. A. W. Mumford, Chicago, 1905.
(Hints on identifying 145 birds based on spring migration
in Lincoln Park, Chicago.)

WHELOCK, IRENE G.

- '02. Rare Birds seen at Lake Forest. Inter Ocean, March.
'05. Regurgitative Feeding of Nestlings. Ank, Vol. XXII, p. 54,
January.

WOODRUFF, FRANK MORLEY.

- '96. On Birds Reported as Rare in Cook County, Illinois. The Auk,
Vol. XIII, 1896, pp. 179-181.
'96A. The Raven in Illinois. The Auk, Vol. XIII, 1896, pp. 83-84.
'97. Lake Michigan Notes. The Auk, Vol. XIV, 1897, pp. 227-228.
'97A. The Home of the Loggerhead Shrike. The Osprey, Vol. I, No. 8,
'98. Lake Michigan Notes. The Auk, Vol. XV, 1898, pp. 61-62.
p. 109.
'00. The Western Willet. Birds and Nature, Vol. VIII, p. 146, No-
vember.
'04. The Loon. Birds and Nature, Vol. XVI, November, pp. 191-192.
'04A. The Sora Rail. L. c., Vol. XVI, December, pp. 201-202.
'05. The American Robin. L. c., Vol. XVII, No. 2, p. 62, February.
'05A. The Black Tern. L. c., No. 3, p. 134, March.
'05B. The American Red Crossbill. L. c., No. 4, p. 191, April.
'05C. The Prothonotary Warbler. L. c., No. 5, p. 194, May.
'05D. The Black-crowned Night Heron. L. c., Vol. XVIII, No. 1, p.
11, June.
'05E. The Mourning Dove. L. c., No. 2, p. 95, September.
'05F. The Snowflake. L. c., No. 3, p. 134, October.
'07. Rare Northern Birds near Chicago. The Ank, Vol. XXIV,
1907, p. 107.

INDEX TO SCIENTIFIC NAMES

- Acanthis*, 130.
Acanthis hornemannii exilipes, 130.
 linaria, 130.
 linaria holboellii, 131.
 linaria rostrata, 131.
Accipiter, 92.
Accipiter atricapillus, 93.
 cooperii, 93.
 velox, 92.
Aetitis, 76.
Aetitis macularia, 76.
Actodromas, 68.
 bairdii, 15, 69.
 fuscicollis, 69.
 maculata, 68.
 miniutilla, 23, 70, 71.
Ægialitis, 80.
Ægialitis meloda, 80.
 melodus var. *circumcinctus*, 18, 80, 81.
 semipalmata, 15, 80.
Ægiothus canescens, 130.
 exilipes, 130.
 rostratus, 131.
Agelaius, 123.
Agelaius phoeniceus, 123.
Aix, 41.
Aix sponsa, 10, 41.
Alaudidae, 119.
Alcedinidae, 109.
Ammodramus, 136.
Ammodramus caudacutus, 137.
 henslowii, 15, 136.
 leconteii, 16, 136.
 nelsoni, 137.
 sandwichensis savanna, 135.
 savannarum passerinus, 135.
Ampelidae, 150.
Ampelis, 150.
Ampelis cedrorum, 151.
 garrulus, 150.
Anas, 36.
Anas acuta, 40.
 albeola, 44.
 americana, 38.
 berniola, 51.
 boschas, 36.
 carulescens, 49.
 canadensis, 50.
 carolinensis, 39.
 clangula, 43.
 columbianus, 52.
 clypeata, 40.
 collaris, 43.
 creeca, 39.
 discors, 39.
 fusca, 46.
 glacialis, 45.
 hyemalis, 45.
 hyperborea, 48.
 islandica, 44.
 jamaicensis, 47.
 mollissima, 45.
 nigra, 46.
 nivalis, 49.
 obscura, 37.
 penelope, 37.
 perspicillata, 47.
 rubida, 47.
 sponsa, 41.
 strepera, 37.
 vallisneria, 42.
Anatide, 35.
Anorthura troglodytes var. *hyemalis*, 184.
Anser, 49.
Anser albifrons, 49.
 berniola, 51.
 carulescens, 49.
 canadensis, 50.
 gambeli, 49.
 hutchinsii, 51.
 hyperboreus var. *albatu*, 48.
 hyperboreus var. *hyperboreus*, 49.
Anseres, 35.
Antrostomus, 113.
Antrostomus vociferus, 113.
Anthus, 178.
Anthus ludovicianus, 178.
 pensilvanicus, 178.
Aphrizida, 82.
Aquila, 97.
Aquila chrysaetos, 97, 98.
 chrysaetos var. *canadensis*, 97.
 fulva, 97.
Archibuteo, 97.
Archibuteo lagopus sancti-johannis, 97.
Ardea, 53.
Ardea herodias, 53.
Ardeidae, 53.
Ardetta, 53.
Ardetta exilis, 53.
Arenaria, 82.
Arenaria interpres, 15, 82.
Arquatella, 68.
Arquatella maritima, 15, 68.
Asio, 102.
Asio accipitrinus, 102.
 wilsonianus, 102.
Astragalinus, 131.
Astragalinus tristis, 131, 132.
Astur palumbarius var. *atricapillus*, 93.
Aythya, 41.
Aythya affinis, 42, 48.
 americana, 41, 47.
 collaris, 43.
 marila, 21.
 vallisneria, 42.
Bæolophus, 188.
Bæolophus bicolor, 188.
Bartramia, 75.
Bartramia longicauda, 75.
Berniella canadensis, 50.
 hutchinsii, 51.
Bonasa, 83.
Bonasa umbellus, 83.
Botaurus, 53.
Botaurus exilis, 53.
 lentiginosus, 53.
 minor, 53.

- Brachyotus palustris*, 102.
Branta, 50.
Branta bernicla, 51.
 canadensis, 50.
 canadensis minima, 22.
 hutchinsii, 51.
 minima, 51.
Bucephala albeola, 44.
 clangula, 43.
 islandica, 44.
Bubo, 106.
Bubo virginianus, 106.
 virginianus arcticus, 106.
Bubonide, 102.
Buteo, 94.
Buteo borealis, 94.
 borealis calurus, 95.
 borealis harlani, 95.
 borealis kriderii, 94.
 latissimus, 96.
 lineatus, 95.
 platypterus, 96.
 swainsoni, 96.
Butorides, 55.
Butorides virescens, 55.
Calcarius, 133.
Calcarius lapponicus, 16, 133, 134.
 pictus, 16, 17, 134.
Calidris, 74.
Calidris arenaria, 15, 74.
Cardinalis, 145.
Cardinalis cardinalis, 145.
 virginianus, 145.
Carpodacus, 128.
Carpodacus purpureus, 128.
Caprimulgide, 113.
Cathartes, 90.
Cathartes aura, 90.
Cathartide, 90.
Certhia, 186.
Certhia familiaris americana, 186.
Certhiide, 186.
Centurus, 112.
Centurus carolinus, 112.
Ceophloeus, 111.
Ceophloeus pileatus abieticola, 111.
Ceryle, 109.
Ceryle alcyon, 109.
Chatura, 114.
Chatura pelagica, 114.
Charadriide, 78.
Charadrius, 79.
Charadrius dominicens, 76, 79.
 fulvus var. *virginicus*, 79.
 marmoratus, 79.
 pluvialis, 79.
Charitonetta, 44.
Charitonetta albeola, 44.
Chauleasmus, 37.
Chauleasmus streperus, 37.
Chen, 48.
Chen caerulescens, 49.
 hyperborea, 48.
 hyperborea nivalis, 49.
Chondestes, 138.
Chondestes grammacus, 15, 138.
Chordeiles, 113.
Chordeiles popetue, 113, 114.
 virginianus, 113.
 virginianus henryi, 113, 114.
Circus, 92.
Circus cyaneus, 92.
 hudsonius, 92.
Cistothorus, 185.
Cistothorus stellaris, 185.
Clangula, 43.
Clangula albeola, 44.
 clangula americana, 43.
 hyemalis, 45.
 islandica, 44.
Coccyges, 108.
Coccyzus, 108.
Coccyzus americanus, 108.
 erythrophthalmus, 108.
Colaptes, 112.
Colaptes auratus luteus, 112.
Colinus, 82.
Colinus virginianus, 82.
Columbae, 86.
Columbide, 86.
Colymbus, 25.
Colymbus auritus, 25.
 nigricollis californicus, 26.
 holboellii, 25.
 septentrionalis, 27.
 toquatus, 27.
Compsothlypis, 159.
Compsothlypis americana ramalinae, 159.
Contopus, 117.
Contopus virens, 117.
Conurus, 108.
Conurus carolinensis, 108.
Corvide, 120.
Crovus, 120.
Corvus americanus, 122.
 brachyrhynchos, 121.
 corax, 120.
 corax var. *carnivorus*, 121.
 corax principalis, 120.
 corax sinuatus, 121.
 corone, 121.
 pica, 120.
Coturniculus, 135.
Coturniculus savannarum passerinus, 15, 135.
Crocirostra minor, 129.
Crymophilus, 62.
Crymophilus fulicarius, 62.
Cryptoglaux, 104.
Cryptoglaux acadica, 105.
 tengmalmi richardsoni, 104.
Cuculida, 108.
Cupidonia americana, 84.
Cyanocitta, 120.
Cyanocitta cristata, 120.
Cygnus americanus, 52.
 bewicki, 52.
Cyanospiza, 146.
Cyanospiza cyanea, 146.
Dafila, 40.
Dafila acuta, 40.
Dendroica, 160.
Dendroica aestiva, 160.
 blackburniae, 164.
 caerulea, 162.
 caerulescens, 16, 161.
 castanea, 163.
 coronata, 161.
 discolor, 169.

- dominica albilora*, 20, 164.
kirtlandii, 165, 166.
maculosa, 160, 161.
palmarum, 167, 169.
pennsylvanica, 162.
pinus, 168.
rara, 162.
striata, 163.
tigrina, 160.
vigorsii, 168.
virens, 165.
Dolichonyx, 122.
Dolichonyx oryzivorus, 122.
Dryobates, 109.
Dryobates pubescens medianus, 109.
villosus, 109.
Ectopistes, 86.
Ectopistes migratoria, 86.
Elanoides, 91.
Elanoides forficatus, 91.
Egretta, 54.
Egretta candidissima, 54, 55.
Empidonax, 117.
Empidonax acadicus, 117, 118.
flaviventris, 117.
minimus, 118.
pusillus var. *trillii*, 118.
trillii, 118.
virescens, 117.
Ereunetes, 71.
Ereunetes pusillus, 23, 71.
Erismatura, 47.
Erismatura jamaicensis, 47.
rubida, 47.
Euphagus, 125.
Euphagus carolinus, 125.
cyanocephalus, 125.
Falco, 99.
Falco anatum, 99.
atricapillus, 93.
buteoides, 95.
columbarius, 99.
communis var. *anatum*, 99.
forficatus, 91.
fureatus, 91.
fuscus, 92.
peregrinus, 99.
peregrinus anatum, 99.
sparverius, 100.
washingtonianus, 98.
wilsoni, 61.
Falconidae, 91.
Fregata aquila, 19.
Fringilla ambigua, 122.
juncorum, 141.
nivalis, 141.
savanna, 135.
Fringillidae, 126.
Fulica, 61.
Fulica americana, 59, 61.
atra, 62.
Fuligula americana, 41.
albeola, 44.
affinis, 42.
clangula, 43.
collaris, 43.
ferina, 41.
marila, 42.
vallisneria, 42.
Galeoscoptes, 180.
Galeoscoptes carolinensis, 180.
Gallina, 82.
Gallinago, 65.
Gallinago delicata, 65, 73.
gallinaria var. *wilsoni*, 65.
wilsoni, 65.
Gallinula, 61.
Gallinula galeata, 61.
chloropus var. *galleata*, 61.
Garzetta candidissima, 55.
Gavia, 27.
Gavia imber, 27.
Gavidae, 27.
Gelechetidon nilotica, 21.
Geothlypis, 175.
Geothlypis macgillivrayi, 174.
trichas, 175.
trichas brachidaetyla, 175.
trichas occidentalis, 175.
Glaucionetta clangula americana, 43.
islandica, 44.
Graculus dilophus, 34.
Grus, 56.
Grus americana, 56.
canadensis, 57.
hoyanus, 56.
mexicana, 57.
Gruidae, 56.
Haliaetus, 98.
Haliaetus leucocephalus, 98.
Harelda, 45.
Harelda glacialis, 45.
hyemalis, 45.
Harporhynchus rufus, 181.
Helminthophila, 157.
Helminthophila celata, 158.
chrysoptera, 157.
peregrina, 159.
pinus, 157.
rubicapilla, 158.
Helodromas, 74.
Helodromas solitarius, 74.
Herodias, 51.
Herodias alba var. *egretta*, 54.
egretta, 54, 55.
Herodiones, 53.
Hesperiphona, 126.
Hesperiphona vespertina, 126.
Himantopus mexicanus, 64.
nigricollis, 61.
Hirundinidae, 148.
Hirundo, 148.
Hirundo americana, 148.
erythrogastra, 148.
fulva, 148.
horreorum, 148.
Histrionicus histrionicus, 21.
Hydrochelidon, 33.
Hydrochelidon lariformis, 34.
nigra surinamensis, 17, 33.
Hylocichla, 191.
Hylocichla aliciae, 193.
fuscescens, 192, 193.
fuscescens salicicola, 192.
guttata pallasii, 194.
mustelina, 191.
unalashkae pallasii, 194.
ustulata swainsoni, 194.

- Icteria, 176.
 Icteria virens, 176.
 viridis, 176.
 Icteridae, 122.
 Icterus, 124.
 Icterus agripennis, 122.
 baltimore, 125.
 galbula, 125.
 pecoris, 122.
 spurius, 124.
 Ictornis, 60.
 Ictornis martinica, 60.
 Iridoprocne, 149.
 Iridoprocne bicolor, 149.
 Junco, 141.
 Junco hyemalis, 141, 143.
 hyemalis shufeldti, 142.
 montanus, 141, 142, 143, 145.
 oreganus, 142, 143.
 oreganus shufeldti, 142.
 oregonus, 141, 142.
 Lagopus, 84.
 Lagopus albus, 84.
 lagopus, 84.
 Laniidae, 152.
 Lanius, 152.
 Lanius borealis, 152.
 ludovicianus, 152.
 Lanivireo, 154.
 Lanivireo flavifrons, 154.
 solitarius, 154.
 Larus, 29.
 Larus argentatus, 29, 30.
 bonapartii, 31.
 californicus, 30.
 delawarensis, 29, 31.
 franklinii, 21.
 glaucus, 15, 19, 20, 29.
 leucopterus, 21, 22.
 marinus, 21.
 philadelphia, 31.
 pomarinus, 28.
 smithsonianus, 29, 30.
 sabinii, 31.
 tridactylus, 28.
 Limicola, 62.
 Limosa, 72.
 Limosa hamastica, 72.
 scelopacea, 67.
 Linaria holboellii, 131.
 minor, 130.
 Lobipes hyperboreus, 63.
 Longipennis, 28.
 Lophodytes, 36.
 Lophodytes cucullatus, 10, 36.
 Loxia, 129.
 Loxia curvirostra, 129.
 curvirostra var. americana, 129.
 curvirostra minor, 129.
 leucoptera, 129.
 Macrorhamphus, 66.
 Macrorhamphus scolopaceus, 67.
 griseus, 13, 66.
 Macrochires, 113.
 Mareca, 37.
 Mareca americana, 38.
 penelope, 37.
 Megascops, 105.
 Megascops asio, 105.
 Melanerpes, 111.
 Melanerpes carolinus, 112.
 erythrocephalus, 111.
 Melanetta velutina, 46.
 Meleagris, 86.
 Meleagris gallopavo, 86.
 gallopavo sylvestris, 86.
 sylvestris, 86.
 Melospiza, 143.
 Melospiza cinerea melodia, 143.
 fasciata, 143.
 lincolni, 143.
 melodia, 143.
 palustris, 143.
 Merganser, 35.
 Merganser americanus, 35.
 serrator, 36.
 Merula, 195.
 Merna migratoria, 195.
 Micropalama, 67.
 Micropalama himantopus, 67.
 Micropodidae, 114.
 Mimida, 179.
 Mimus, 179.
 Mimus felivox, 181.
 polyglottus, 179.
 Mniotilta, 155.
 Mniotilta varia, 155.
 Mniotiltidae, 155.
 Molothrus, 122.
 Molothrus ater, 122.
 Motacilla auricollis, 156.
 protonotarius, 156.
 Motacillidae, 178.
 Myadestes townsendii, 20.
 Myiarchus, 115.
 Myiarchus crinitus, 115.
 Muscicapa selbyi, 176.
 Nauclerus furcatus, 91.
 Nettion, 39.
 Nettion carolinensis, 39.
 Numenius, 77.
 Numenius borealis, 78.
 ludsonicus, 77, 78.
 intermedius, 77.
 longirostris, 77.
 Nuttallornis, 116.
 Nuttallornis borealis, 116.
 Nyctale richardsoni, 104.
 Nyctea, 106.
 Nyctea nyctea, 106.
 scandiaca, 106.
 scandiaca var. arctica, 106.
 Nycticorax, 55.
 Nycticorax nycticorax naevius, 55.
 Oidemia, 46.
 Oidemia americana, 46, 47.
 deglandi, 46.
 perspicillata, 47.
 Olbiorechilus, 184.
 Olbiorechilus hiemalis, 184, 185.
 Olor, 52.
 Olor buccinator, 21.
 columbianus, 52.
 Oporornis, 172.
 Oporornis agilis, 173.
 formosa, 172, 173.
 philadelphia, 174.
 tolmiei, 174.

- Opuntia rafinesquii*, 16.
Otocoris, 119.
Otocoris alpestris, 119.
 alpestris leucolama, 119.
 alpestris praticola, 119.
Otus vulgaris, 102.
Oxyechus, 79.
Oxyechus vociferus, 79.

Paludicola, 56.
Pandion, 100.
Pandion carolinensis, 100.
 haliaetus carolinensis, 100.
Paridae, 188.
Parula americana, 159.
Parus atricapillus, 189.
 carolinensis, 189.
 hudsonicus, 22, 189.
Passerculus, 135.
Passerculus sandwichensis savanna, 135.
Passerella, 144.
Passerella iliaca, 144.
Passeres, 115.
Passerina, 132.
Passerina nivalis, 132.
Pavoncella pugnax, 22.
Pediocetes, 85.
Pediocetes columbianus, 85.
 phasianellus, 85.
 phasianellus campestris, 85.
 phasianellus var. columbianus, 85.
Pelecanidae, 35.
Pelecanus, 35.
Pelecanus dilophus, 34.
 erythrorhynchus, 35.
 onocrotalus, 35.
 trachyrhynchus, 35.
Pelidna, 71.
Pelidna alpina americana, 71.
 alpina pacifica, 71.
 alpina sakhalina, 23, 71.
 pacifica, 71.
Penthestes, 187.
Penthestes atricapillus, 189.
 carolinensis, 189.
 hudsonicus, 189.
Perisoreus canadensis, 20, 22.
Petrochelidon, 148.
Petrochelidon lunifrons, 148.
Phalacrocoracidae, 34.
Phalacrocorax, 34.
Phalacrocorax dilophus, 34.
 dilophus floridanus, 21.
Phalaropodidae, 62.
Phalaropus, 63.
Phalaropus lobatus, 63.
 tricolor, 63.
 wilsoni, 63.
Phasianidae, 85.
Philohela, 65.
Philohela minor, 18, 65.
Pica, 120.
Pica pica hudsonia, 120.
Pica melanoleuca, 120.
Pici, 109.
Picidae, 109.
Picoides, 110.
Picoides arcticus, 110.
Picus caudata var. hudsonica, 120.

Picus medianus, 110.
 pileatus, 111.
 pubescens, 109.
Pinicola, 128.
Pinicola canadensis, 128.
 enucleator, 128.
 enucleator canadensis, 128.
Pipilo, 144.
Pipilo erythrophthalmus, 144.
 maculatus arcticus, 144.
Piranga, 147.
Piranga erythromelas, 147.
 rubra, 147.
Plegadis autumnalis, 21.
Podiceps californicus, 26.
 cornutus, 25.
 griseigena var. holbollii, 25.
 holbellii, 25.
 rubricollis, 25.
Podicipidae, 25.
Podilymbus, 26.
Podilymbus podiceps, 18, 26.
Polioptila, 191.
Polioptila cerulea, 191.
Poocetes, 135.
Poocetes gramineus, 135.
Porzana, 58.
Porzana carolina, 58.
 jamaicensis, 59, 60.
 noyehoracensis, 59.
Progne, 148.
Progne purpurea, 148.
 subis, 148.
Protonotaria, 156.
Protonotaria citrea, 156.
Psittaci, 108.
Psittacidae, 108.
Pygopodes, 25.
Pyrranga aestiva, 147.

Querquedula, 39.
Querquedula carolinensis, 39.
 discors, 10, 39.
Quiscalus, 126.
Quiscalus aneus, 126.
 ferrugineus, 125.
 purpureus aneus, 126.
 quiscula aneus, 126.

Rallidae, 57.
Rallus, 57.
Rallus crepitans, 57.
 elegans, 57.
 lariformis, 34.
 virginianus, 58.
Raptores, 90.
Recurvirostra, 64.
Recurvirostra americana, 64.
Recurvirostridae, 64.
Regulus, 190.
Regulus calendula, 190.
 cristatus, 190.
 satrapa, 190.
Riparia, 149.
Riparia riparia, 149.
Rissa, 28.
Rissa tridaetyla, 15, 20, 28.

Sayornis, 116.
Sayornis phoebe, 116.

- Scolopacidae, 65.
 Scolopax delicata, 65.
 flavipes, 73.
 hudsonica, 72.
 sakhalina, 71.
 Scotiaptex, 103.
 Scotiaptex nebulosa, 103.
 Setophaga, 178.
 Setophaga ruticilla, 178.
 Seiurus, 169.
 Seiurus aurocapillus, 169.
 ludovicianus, 172.
 motacilla, 172.
 naevius notabilis, 170, 171.
 noveboracensis, 22, 170, 171, 172.
 noveboracensis notabilis, 170,
 171, 172.
 Sialia, 195.
 Sialia sialis, 195.
 Sitta, 187.
 Sitta canadensis, 187.
 carolinensis, 187.
 Sittidae, 187.
 Somateria, 45.
 Somateria dresseri, 45.
 mollissima, 45.
 spectabilis, 21, 22.
 Sparvius platypterus, 97.
 Spatula, 40.
 Spatula clypeata, 40.
 Sphyrapicus, 110.
 Sphyrapicus ruber, 111.
 varius, 110.
 varius nuchalis, 111.
 Spinus, 132.
 Spinus pinus, 132.
 Spiza, 146.
 Spiza americana, 146.
 Spizella, 140.
 Spizella monticola, 133, 140.
 pallida, 140.
 pusilla, 141.
 socialis, 140.
 Squatarola, 78.
 Squatarola squatarola, 15, 78.
 Steganopodes, 34.
 Steganopus, 63.
 Steganopus tricolor, 18, 63.
 Stelgidopteryx, 150.
 Stelgidopteryx serripennis, 150.
 Stercorariidae, 28.
 Stercorarius, 28.
 Stercorarius parasiticus, 22.
 pomarinus, 22, 28.
 Sterna, 32.
 antillarum, 33.
 caspia, 15, 20, 32.
 forsteri, 32.
 havelli, 32.
 hirundo, 32, 33.
 maxima, 21.
 nigra, 33.
 philadelphia, 31.
 plumbea, 33.
 superciliaris, 33.
 surinamensis, 33.
 tschegrava, 32.
 Sternula antillarum, 33.
 Strigidae, 101.
 Strix, 101.
 Strix arctica, 106.
 brachyotus, 102.
 caparoch, 107.
 cinerea, 103.
 flammea, 101.
 flammea var. americana, 101.
 flammea var. pratincola, 101.
 hudsonica, 107.
 otus, 102.
 pratincola, 101.
 tengmalmi, 104.
 Sturnella, 124.
 Sturnella magna, 124.
 neglecta, 124.
 Sturus ludovicianus, 124.
 Surnia, 107.
 Surnia funeria, 107.
 ulula caparoch, 107.
 ulula var. hudsonica, 107.
 Sylvia autumnalis, 163.
 canadensis, 161.
 icterocephala, 162.
 maritima, 160.
 pardalina, 177.
 protonotaria, 156.
 ruficapilla, 158.
 wilsonii, 177.
 Sylvania bonapartii, 177.
 Sylvide, 190.
 Symphemia, 74.
 Symphemia semipalmata, 15, 74, 75.
 semipalmata inornata, 74, 75.
 Syrnum, 103.
 Syrnum varium, 103.
 Tachycineta, 149.
 Tachycineta lepida, 149.
 thalassina, 149.
 thalassina lepida, 149.
 Tanagridae, 147.
 Tantalus loculator, 21.
 Telmatodytes, 185.
 Telmatodytes palustris iliacus, 185.
 palustris plesius, 186.
 Tetrao phasianellus, 85.
 saliceti, 84.
 Tetraonidae, 82.
 Thryomanes, 182.
 Thryomanes bewickii, 182.
 Thryothorus, 181.
 Thryothorus ludovicianus, 181.
 Totanus, 72.
 Totanus chloropygius, 74.
 flavipes, 67, 73.
 melanoleucus, 72.
 Toxostoma, 181.
 Toxostoma rufum, 181.
 Trichas brachydactyla, 175.
 tephrocotis, 173.
 Tringa, 68.
 Tringa alpina, 71.
 bartramia, 75.
 bonapartei, 69.
 canutus, 15, 23, 68.
 cinerea, 68.
 douglasii, 67.
 helvetica, 78.
 pectoralis, 69.
 pusilla, 70.
 rufescens, 76.

- Tringa schinzii*, 69.
 semipalmata, 71.
 wilsonii, 70.
Trochilidae, 114.
Trochilus, 114.
Trochilus colubris, 114.
Troglodytes, 183.
Troglodytes ædon, 183, 184.
 ædon var. *aztecus*, 184.
 ædon parkmanii, 184.
 bewickii, 182.
 brevirostris, 185.
 hiemalis, 184.
 ludovicianus, 181.
 palustris, 185.
 parkmanii, 184.
 parvulus var. *hyemalis*, 185.
 stellaris, 185.
Troglodytidae, 181.
Tryngites, 75.
Tryngites subruficollis, 75.
Turdidae, 191.
Turdus aliciae, 193.
 aonalaschke pallasii, 194.
 fuscescens, 192.
 fuscescens salicicola, 192.
 mustelinus, 191.
 pallasii, 194.
 swainsoni, 194.
 swainsoni var. *aliciae*, 193.
 ustulatus swainsoni, 194.
 wilsonii, 192.
Tympanuchus, 84.
Tympanuchus americanus, 84.
Tyrannidae, 115.
Tyrannus, 115.
Tyrannus carolinensis, 115.
 cooperi, 116.
 fuscus, 116.
 intrepidus, 115.
 minima, 118.
 tyrannus, 115.
Uria lomvia, 19.
Urinator arcticus, 21.
 imber, 27.
 lumme, 27.
Vireo, 154.
Vireo bellii, 155.
 flavifrons, 16, 154.
 gilvus, 16.
 novaboracensis, 154, 155.
 solitarius, 154.
Virionidae, 152.
Vireosylva, 152.
Vireosylva gilva, 153.
 olivacea, 152.
 philadelphica, 153.
Wilsonia, 176.
Wilsonia canadensis, 177.
 mitrata, 176.
 pusilla, 177.
Xanthocephalus, 123.
Xanthocephalus icterocephalus, 123.
 xanthocephalus, 123.
Xema, 31.
Xema sabina, 31.
Zamelodia, 145.
Zamelodia ludoviciana, 145.
Zenaidura, 90.
Zenaidura carolinensis, 90.
 macronra, 90.
Zonotrichia, 139.
Zonotrichia albicollis, 139.
 canadensis, 140.
 coronata, 20.
 leucophrys, 139.
 leucophrys intermedia, 20.
 querula, 139.

INDEX TO COMMON NAMES.

- Avocet, American, 64.
 Bee Bird, Red, 147.
 Bee Martin, 415.
 Beetle-head, 78.
 Bird, Beach, 80.
 Bee, 115.
 Bell, 191.
 Cedar, 151.
 Cherry, 151.
 Fire, 125.
 Grass, 135.
 Grasshopper, 135.
 Green, 146.
 Ground, 135.
 Hanging, 125.
 Indigo, 146.
 Myrtle, 161.
 Peabody, 139.
 Potato, 138.
 Potato-bug, 146.
 Rice, 122.
 Strawberry, 128.
 Of Washington, 98.
 Birds of Prey, 90.
 Birds, Surf, 82.
 Bittern, American, 53.
 American Least, 53.
 Least, 53.
 Little, 53.
 Little Yellow, 53.
 Minute, 53.
 Tortoise-shell, 53.
 Black-breast, 78.
 Blackbird, blue-headed, 125.
 Brewers, 125.
 Cow, 122.
 Crow, 125.
 Red-shouldered, 123.
 Red-winged, 123.
 Rusty, 125, 126.
 Skunk, 122.
 Swamp, 123.
 Violet-headed, 125.
 Western Crow, 125.
 Yellow-headed, 123.
 Black-cap, Wilson's, 17.
 Bluebird, 13, 14, 15, 23, 191, 195.
 Eastern, 195.
 Blue Peter, 60.
 Bob Lincoln, 122.
 Bob-white, 82.
 Bobolink, 122.
 Bog-bull, 53.
 Bog-sucker, 65.
 Booby, 55.
 Bottle-head, 78.
 Brant, 49, 51.
 Bald, 49.
 Bird, 82.
 Blue, 49.
 Common, 51.
 Goose, 51.
 Harlequin, 49.
 Gray, 49.
 Pied, 49.
 Brant Prairie, 49.
 White, 48, 49.
 White-headed, 49.
 Yellow-legged, 49.
 Bull Bat, 113.
 Bull-head, 78, 79.
 Bumblebee, 70.
 Bunting, Bay-winged, 135.
 Black-throated, 146.
 Cow, 122.
 Cowpen, 122.
 Henslow's, 136.
 Indigo, 146.
 Leconte's, 136.
 Painted, 134.
 Painted Lark, 134.
 Smith's, 134.
 Snow, 122.
 Butcher Bird, Great Northern, 152.
 Southern, 152.
 Buzzard, 90.
 Turkey, 90.
 Calico-back, 82.
 Canary, Wild, 160.
 Cardinal, 145.
 Catbird, 180, 181.
 Cedar-lark, 151.
 Chat, Yellow-breasted, 176.
 Chatterer, Waxen, 150.
 Chewink, 144.
 Chickadee, 189.
 Black-capped, 189.
 Carolina, 14, 189.
 Eastern, 189.
 Hudsonian, 20, 21, 189, 190.
 Northern, 189.
 Southern, 189.
 Chicken, Prairie, 84, 85.
 Chickty-beaver, 155.
 Chip-bird, 140.
 Field, 141.
 Chippy, 140.
 Field, 141.
 Red-billed, 141.
 Winter, 140.
 Clodhopper, 122.
 Coot, American, 61, 62.
 Blue, 60.
 Booby, 47.
 Bull, 46.
 Butter-billed, 46.
 Gray, 47.
 Heavy-tailed, 47.
 Hollow-billed, 46.
 Horse-head, 47.
 Sleepy, 47.
 Surf, 47.
 White-winged, 46.
 Cormorant, Florida, 21.
 Double-crested, 34.
 Corn-cracker, 145.
 Cowbird, 122.
 Cow-cow, 108.
 Crane, Brown, 57.
 Great White, 56.

- Crane, Sandhill, 57.
 White Sandhill, 56.
 Whooping, 56, 57.
 Creaker, 69.
 Crab-catcher, 55.
 Creeper, American Tree, 187.
 Black and White, 155.
 Brown, 186, 187.
 Striped, 155.
 Crossbill, 17.
 American, 129.
 American Red, 129.
 Red, 129.
 White-winged, 129, 130.
 Crow, 15, 120.
 American, 121.
 Carion, 90.
 Common, 122.
 Duck, 62.
 Rain, 108, 109.
 Cuckoo, Black-billed, 108.
 Yellow-billed, 108.
 Curlew, Big, 77.
 Eskimo, 78.
 Hudsonian, 77, 78.
 Jack, 77.
 Little, 78.
 Long-billed, 77.
 Short-billed, 77.
 Sickle-billed, 77.
 Dab-chick, 26.
 Darter, 93.
 Dickcissel, 146.
 Di-capper, 26.
 Diver, Great Northern, 27.
 Red-throated, 27, 28.
 Dough-bird, 78.
 Dowitcher, 15, 66.
 Dowitcher, Long-billed, 67.
 Dove, American Turtle, 90.
 Carolina, 90.
 Common, 90.
 Mourning, 90.
 Turtle, 90.
 Duck, American Eider, 45.
 American Pochard, 41.
 Bald-crown, 38.
 Bald-headed, 38.
 Baldpate, 38.
 Big Sea, 45.
 Black, 37.
 Black-head, 43.
 Black Jack, 43.
 Blue-bill, 43.
 Blue-wing, 39.
 Brass-eye, 43.
 Bridal, 41.
 Bristle-tail, 47.
 Broady, 40.
 Broad-bill, 42.
 Buffle-head, 44.
 Bull-neck, 42.
 Butter, 40.
 Butter-ball, 44.
 Butter-bill, 46.
 Cannon Ball, 42, 44.
 Canvas-back, 10, 41, 42.
 Cob-head, 43.
 Cock Robin, 36.
 Coot, 43.
 Creek, 37.
 Crow, 31, 36.
 Deaf, 47.
 Dipper, 44.
 Dummy, 44, 47.
 Eider, 18.
 Fall, 43.
 Fan-crest, 36.
 Fish, 35.
 Fool, 47.
 Gadwall, 37.
 Gar-bill, 36.
 Golden-eye, American, 43.
 Golden-eye, Barrows, 44.
 Golden-eye, Rocky Mountain, 44.
 Goosander, 36.
 Gray, 36, 37.
 Great-head, 43.
 Greater Scaup, 21.
 Green-head, 38.
 Green-wing, 39.
 Hairy-head, 36.
 Harlequin, 21.
 Iron-head, 43.
 King Eider, 21, 22.
 Lesser Scaup, 42, 43, 47.
 Little Black-head, 42.
 Little Blue-bill, 42.
 Long-neck, 40.
 Long-tailed, 45.
 Mallard, 41.
 March Blue-bill, 42.
 Merry-wing, 43.
 Moon-bill, 43.
 Moss-head, 36.
 Mud Blue-bill, 42.
 Mud-shoveller, 40.
 Old Injun, 45.
 Old Molly, 45.
 Old Squaw, 18, 19, 44, 45.
 Old Wife, 45.
 Pheasant, 40.
 Pheasant, Water, 40.
 Pick-axe, 36.
 Picket-tail, 40.
 Pintail, 19, 40, 41.
 Poacher, White-bellied, 38.
 Red-head, 41, 47.
 Red-headed Broad-bill, 41.
 Red-headed Bull-neck, 42.
 Ring-bill, 43.
 Ring-billed Shuffler, 43.
 Ring-necked, 43.
 River, 42.
 River Scaup, 42.
 River Shuffler, 42.
 Rook, 47.
 Ruddy, 47, 48.
 Saw-bill, 35, 46.
 Scolder, 45.
 Scoter, 46.
 Scoter, White-winged, 44.
 Sea, 47.
 Shovel-bill, 40.
 Shoveller, 40.
 Sleepy, 47.
 Smutty, 46.
 Snowl, 36.
 Spike-tail, 40.
 Spine-tailed, 47.

- Duck, Spirit, 44.
 Spoon-bill, 40.
 Squaw, 45.
 Stiff-tail, 47.
 Summer, 41.
 Surf, 47.
 Velvet, 46.
 Wheat, 38.
 White-back, 42.
 White-face, 39.
 White-wing, 46.
 Whistler, 43.
 Whistle-wing, 43.
 Wood, 10, 36, 41.
 Yellow-bill, 46.
 Dunlin, 71.
 Eagle, American Sea, 98.
 Bald, 10, 98.
 Black, 97.
 Fish, 100.
 Golden, 97, 98.
 Gray, 98.
 Ring-tailed, 97.
 White-headed, 98.
 Egret, American, 10, 54.
 Little, 55.
 Little White, 55.
 Falcon, Great-footed, 99.
 Field-fare, American, 195.
 Fieldlark, 124.
 Western, 124.
 Finch, Grass, 135.
 Harris', 139.
 Lark, 138.
 Lincoln's, 143.
 Mourning, 139.
 Nelson's Sharp-tailed, 137.
 Pine, 132.
 Roseate, 128.
 Sharp-tailed, 48.
 Flicker, Northern, 112.
 Yellow-shafted, 112.
 Flycatcher, Acadian, 117.
 Canada, 177.
 Crested, 115.
 Fan-tailed, 178.
 Great-crested, 115.
 Green-crested, 117.
 Least, 118.
 Olive-sided, 116.
 Pewit, 116.
 Traill's, 118.
 Tyrant, 115.
 Yellow-bellied, 115, 117.
 Yellow-tailed, 178.
 Fly-up-the-Creek, 55.
 Gallinaceous Birds, 82.
 Gallinule, American, 61.
 Florida, 18, 61, 62.
 Purple, 60.
 Gnatcatcher, Blue-gray, 191.
 Eastern, 191.
 Goatsucker, 113.
 Godwit, Hudsonian, 72.
 Golden-crest, American, 190.
 Goldfinch, American, 131.
 Pine, 132.
 Goose, American White-fronted, 49.
 Bay, 50, 51.
 Big Wild, 50.
 Blue, 49.
 Blue-winged, 49.
 Brent, 51.
 Cackling, 22.
 Canada, 50.
 Common Wavy, 49.
 Common Wild, 50.
 Cravat, 50.
 Eskimo, 51.
 Gray, 51.
 Greater Snow, 49.
 Honker, 50.
 Hutchins's, 51.
 Laughing, 49.
 Lesser Canada, 51.
 Lesser Snow, 48, 49.
 Little Wild, 51.
 Mexican, 49.
 Nigger, 34.
 Prairie, 49, 51.
 Red, 49.
 Snow, 48.
 Speckle-belly, 49.
 Texas, 49.
 White-head, 49.
 Yellow-legged, 49.
 Goshawk, American, 93.
 Grackle, Bronzed, 125.
 Rusty, 125.
 Gray-back, 66.
 Grebe, American Eared, 26.
 American Red-necked, 25.
 California, 26.
 Carolina, 26.
 Cooper's, 25.
 Dusky, 25.
 Holbein's, 25.
 Horned, 25, 26.
 Pied-billed, 18.
 Greenlets. See Vireos, 153, 154, 155.
 Grosbeak, Canadian Pine, 128.
 Cardinal, 145.
 Evening, 17, 126, 127.
 Purple, 128.
 Red-breasted, 146.
 Roseate, 128.
 Rose-breasted, 145.
 Grouse, Drumming, 83.
 Pinnated, 84.
 Ruffed, 83, 84.
 Ruffed, 83.
 Sharp-tailed, 85.
 Willow, 84.
 Guinea Duck, 27.
 Gull, American Herring, 30.
 Big Mackerel, 32.
 Bonaparte's, 30, 31.
 Burgomaster, 19, 21.
 European Herring, 30.
 Fork-tailed, 31.
 Franklin's, 18, 21.
 Glaucous, 15, 18, 20.
 Gray, 29.
 Great Black-backed, 21.
 Herring, 29, 30.
 Hutchins's, 29.
 Iceland, 21, 22.
 Kittiwake, 15, 20, 28.
 Mackerel, 33.

- Gul, Molly, 31, 33.
 Ring-billed, 30, 31.
 Sabine's, 31.
 Saddle-back, 21.
 Sea, 29.
 Summer, 33.
 White, 29.
 White-winged, 21.
 Winter, 28.
 Gull-chaser, 28.
 Gull-hunter, 28.
 Hair-bird, 140.
 Hanging-bird, Little Green, 155.
 Harrier. See Hawks, 92.
 Hawk, American Rough-legged, 97.
 American Sparrow, 100.
 Black, 97.
 Black Red-tail, 95.
 Blue, 93.
 Blue Chicken, 93.
 Blue Quail, 93.
 Broad-winged, 96.
 Bullet, 92, 93.
 Chicken, 93, 94, 95.
 Cooper's, 93.
 Duck, 99.
 Eastern Red-tail, 94.
 Fish, 100.
 Fish-tail, 91.
 Harlan's, 95.
 Hen, 94, 95.
 Krider's, 94.
 Little Blue, 100.
 Little Swift, 92.
 Marsh, 92.
 Mouse, 100.
 Pigeon, 92, 99.
 Quail, 93.
 Red-shouldered, 95, 96.
 Sharp-shinned, 92, 93.
 Slate-colored, 92.
 Snake, 91.
 Swainson's, 96.
 Swallow-tailed, 91.
 Swift, 93.
 White-breasted Chicken, 94.
 White Hen, 94.
 White Red-tailed, 94, 95.
 Hell-diver, 25, 26, 27.
 Hen, Indian, 53.
 Marsh, 57.
 Mud, 57.
 Prairie, 84, 85.
 Sedge, 57.
 Heron, American Black-crowned
 Night, 56.
 Black-crowned Night, 55.
 Great Blue, 11, 53, 54.
 Green, 55.
 Little Snow, 55.
 Snowy, 54.
 High-hole, 112.
 High-holder, 112.
 Hummingbird, Ruby-throated, 114.
 Ibis, Glossy, 21.
 Wood, 20.
 Jack, Red-breasted, 66.
 Jaeger, Parasitic, 22.
 Pomarine, 22, 28.
 Jarce, 144.
 Jay, 15.
 Blue, 120.
 Canada, 20, 22.
 Junco, Montana, 141.
 Shufeldt's, 142.
 Slate-colored, 111.
 Kestrel, American, 100.
 Kildee, 79.
 Killdeer, 79.
 Kingbird, 115.
 Kingfisher, Belted, 108, 109.
 Kinglet, Golden-crested, 190.
 Golden-crowned, 190.
 Ruby-crowned, 190.
 Kite, White-headed Swallow, 91.
 Swallow-tailed, 91.
 Kittiwake, 28, 29.
 Knot, 15, 23, 68.
 Lark, Horned, 119.
 Prairie, 119.
 Prairie Horned, 119.
 Sand, 76.
 Shore, 119.
 Snow, 119.
 Lawyer, 64.
 Lettuce-bird, 132.
 Linnet, 146.
 Linnet, Hoary, 130.
 Pine, 132.
 Purple, 128.
 Redpoll, 131.
 Rosy, 128.
 Logcock, 11.
 Long-beak, Greater, 67.
 Long-shanks, 64.
 Longspur, Lapland, 16, 133.
 Painted, 17, 134.
 Smith's, 16, 17, 134.
 Look-up, 53.
 Loon, 27.
 Loon, Black, 34.
 Black-throated, 21.
 Red-throated, 27.
 Magpie, American, 120.
 Black-billed, 120.
 Mallard, 36, 37.
 Gray, 36.
 Man-o'-war Bird, 19, 20.
 Martin, 148.
 Martin, American, 148.
 House, 148.
 Purple, 148.
 Rough-winged Sand, 150.
 Sand, 150.
 Meadowlark, Little, 146.
 Western, 124.
 Merganser, 35.
 Merganser, American, 35.
 Buff-breasted, 35.
 Hooded, 10, 36.
 Red-breasted, 19, 36.
 Merlin, American, 100.
 Mire-drum, 53.
 Mockingbird, 178, 180, 181, 192.
 Mockingbird, English, 181.
 Ferruginous, 181.
 Fox-colored, 181.
 French, 181.

- Mockingbird, Sandy, 181.
 Southern, 179.
 Yellow, 176.
 Mud-hen, 61, 62.
 Mud-hen, Blue, 60.
 Red-billed, 61.
 White-billed, 62.
 Mud-snipe, 65.
 Murre, Brunnich's, 19.

 Nighthawk, 113, 114.
 Nightingale, Virginia, 145.
 Night Heron, 55.
 Nuthatch, 14.
 Nuthatch, Canada, 187.
 Red-breasted, 187.
 White-breasted, 187.

 Old Abe, 98.
 Oriole, Baltimore, 125.
 Brown, 124.
 Chestnut-colored, 124.
 Golden, 125.
 Orchard, 124.
 Orioles, 122.
 Orlotan, 58.
 Osprey, American, 100.
 Oven-bird, 169, 170.
 Owl, Acadian, 105.
 American Barn, 101.
 American Hawk, 107.
 American Long-eared, 102.
 Arctic Horned, 106.
 Barred, 103.
 Booby, 106.
 Cat, 106.
 Day, 107.
 Ermine, 106.
 Great Cinereous, 103.
 Great Gray, 103.
 Great Horned, 106.
 Great White, 106.
 Hoot, 103, 106.
 Hudsonian Hawk, 107.
 Lesser Horned, 102.
 Little Gray, 105.
 Little Mottled, 105.
 Little Red, 105.
 Marsh, 102.
 Monkey, 101.
 Mottled, 105.
 Prairie, 102.
 Richardson's, 104.
 Saw-whet, 105.
 Screech, 105.
 Short-eared, 102.
 Snow, 106.
 Snowy, 106, 107.
 Sparrow, 104.
 Spectral, 103.
 Swamp, 102.
 White, 106.
 White-fronted, 105.
 Ox-eye, 71, 78.

 Parrots, 108.
 Paroquet, Carolina, 19, 108.
 Illinois, 108.
 Partridge, 82, 83.
 Peep, 70, 71.
 Peet-weet, 76, 74.

 Pelican, American White, 35.
 Rough-billed, 35.
 Perching Birds, 115.
 Peregrine, American, 99.
 Pewee, 116.
 Pewee, Wood, 117.
 Phalarope, Northern, 62, 63.
 Red, 62.
 Wilson's, 18, 63.
 Pheasant, 83, 86.
 Phoebe, 116.
 Phoebe, Barn, 116.
 Pigeon, Passenger, 86, 87, 88, 89.
 Sea, 31, 33.
 Wild, 86, 88, 89.
 Wood, 86, 108.
 Pink-stockings, 64.
 Pin-tail, 85.
 Pipit, American, 178.
 Louisiana, 178.
 Pennsylvania, 178.
 Plover, American Golden, 79.
 American Ring, 80.
 Black-bellied, 15, 23, 78, 79.
 Belted Piping, 18, 80, 81.
 Field, 75.
 Golden, 76.
 Green, 79.
 Killdeer, 79.
 Marsh, 69.
 May, 69.
 Piping, 80.
 Prairie, 75.
 Ringed Piping, 80.
 Semipalmated, 15, 80.
 Upland, 75.
 Western Piping, 80.
 Post-driver, 53.
 Prairie Pigeon, 79.
 Ptarmigan, White, 84.
 Willow, 84.

 Qua-bird, 56.
 Quail, 82.
 Quail, American, 82.
 Virginia, 82.
 Quak, 56.

 Rail, Black, 59, 60.
 Carolina, 58.
 Clapper, 57.
 Common, 58.
 King, 18, 57, 61.
 Little, 59.
 Little Black, 60.
 Little Yellow, 59.
 Red, 58.
 Red-breasted, 57.
 Sora, 58.
 Virginia, 58.
 Yellow, 59.
 Raven, Northern, 120.
 Redbreast, 195.
 Redbird, 115.
 Redbird, Black-winged, 147.
 Cardinal, 145.
 Crested, 145.
 Summer, 147.
 Virginian, 145.
 Redpoll, 130.
 Redpoll, Common, 131.

- Redpoll, Dusky, 131.
 Greater, 131.
 Hoary, 130.
 Hobbs's, 131.
 Lesser, 131.
 Mealy, 130.
 White-rumped, 130.
 Redstart, American, 178.
 Reed-bird, 58, 122.
 Ring-neck, 80.
 Robin, 14, 45, 195.
 Robin, American, 195.
 Golden, 125.
 Ground, 144.
 Swamp, 194.
 Wood, 191.
 Ruff, 22.
 Sanderling, 15, 71.
 Sandpeter, 33.
 Sandpiper, Baird's, 15, 69.
 Bartramian, 75.
 Bonaparte's, 69.
 Buff-breasted, 75, 76.
 Knot, 68.
 Least, 23, 70.
 Long-legged, 67.
 Pectoral, 68.
 Red-backed, 23, 71.
 Purple, 15, 68.
 Semipalmated, 23, 71.
 Solitary, 74.
 Spotted, 76, 77.
 Stilt, 67.
 White-rumped, 69.
 Wilson's, 70.
 Sapsucker, 15, 187.
 Sapsucker, Blue, 187.
 Big, 169.
 Little, 110.
 Red-throated, 110.
 Yellow-bellied, 110.
 Schytopoke, 55.
 Scoter, 18.
 Scoter, American, 46.
 American Black, 46.
 American Velvet, 46.
 Surf, 47.
 White-winged, 46, 47.
 Sheldrake, 19, 25, 36.
 Sheldrake, Hooded, 36.
 Pond, 36.
 Wood, 36.
 Shrike, 15.
 Shrike, Common American, 152.
 Great American, 152.
 Loggerhead, 152.
 Louisiana, 152.
 Northern, 152.
 Sickie-bill, 77.
 Siskin, Pine, 132.
 Skylark, 119.
 Skylark, American, 119.
 Skuas, 28.
 Snipe, 65.
 Snipe, American, 65.
 Blind, 65.
 Common, 65.
 English, 65, 72.
 Frost, 67.
 Grass, 69.
 Gray, 66.
 Gutter, 65.
 Jack, 65, 69.
 Meadow, 69.
 Red-backed, 71.
 Red-breasted, 66.
 River, 76.
 Robin, 23, 66, 67, 68.
 Rock, 68.
 Sand, 69, 70, 71, 76.
 Sickle-bill, 77.
 Stone, 72.
 White, 71.
 Wilson's, 65, 73.
 Wood, 71.
 Snowbird, 119, 131, 141.
 Snowbird, Black, 141.
 Brown, 133.
 Common, 141.
 Gray, 141.
 Slate-colored, 141.
 White, 132.
 Snowflake, 17, 132, 133.
 Solitaire, Townsend's, 20.
 Sora, 58, 59.
 Sparrow, Canadian, 110.
 Chipping, 140.
 Clay-colored, 140.
 Field, 141.
 Fox, 144.
 Fox-colored, 141.
 Golden-crowned, 20.
 Grasshopper, 15, 135.
 Harris', 139.
 Henslow's, 15, 136.
 Intermediate, 20.
 Lark, 11, 15, 138.
 Leconte's, 16, 136, 137.
 Lincoln's, 143.
 Lincoln's Song, 113.
 Nelson's, 137, 138.
 Rufous, 144.
 Savanna, 135.
 Song, 143.
 Swamp, 16, 137, 143.
 Swamp Song, 143.
 Tree, 140.
 Vesper, 135.
 White-crowned, 20, 135.
 White-throated, 139.
 Winter, 140.
 Yellow-browed, 139.
 Yellow-winged, 135.
 Squawk, 55.
 Speckle-belly, 37.
 Spike-tail, 85.
 Sprig-tail, 85.
 Stake-driver, 53.
 Starling, Red-winged, 123.
 Stilt, 64.
 Stilt, Black-necked, 64.
 White-tailed, 69.
 Stink-bird, 186.
 Striker, 32, 33.
 Striker, Little, 33.
 Swallow, American Barn, 148, 149.
 Bank, 149.
 Black, 34.
 Black and White, 149.
 Bridge, 150.
 Chimney, 114.

- Swallow, Cliff, 148.
 Crescent, 148.
 Eave, 148.
 Forked-tailed Barn, 148.
 Green-blue, 149.
 Purple, 148.
 Republican, 148.
 Rough-winged, 150.
 Rough-winged Bank, 150.
 Rufous-bellied, 148.
 Sand, 150.
 Sea, 33.
 Square-tailed, 148.
 Tree, 149.
 Violet, 148.
 Violet-green, 149.
 White-bellied, 149.
 White-fronted, 148.
- Swan, American, 52.
 Trumpeter, 21.
- Swans, 35.
- Sweep, Chimney, 114.
- Swimmers, Lamellirostral, 35.
- Swimmers, Totipalmate, 34.
- Swift, Chimney, 114.
- Tanager, Red, 147.
 Scarlet, 147.
 Summer, 147.
 Vermilion, 147.
- Tattler, 74.
- Tattler, Bartramian, 75.
 Solitary, 74.
- Teal, Blue Winged, 10, 39, 40.
 Green-winged, 39.
 Mud, 39.
 Red-headed, 39.
 Scotch, 44.
 Summer, 39.
 Winter, 39.
- Tell-tale, 72, 79.
- Tell-tale, Lesser, 73.
- Teeter, 74.
- Tern, Black, 17, 33, 34.
 Caspian, 15, 20, 32.
 Common, 32, 33.
 Foster's, 32.
 Gull-billed, 21.
 Havell's, 32.
 Least, 33.
 Royal, 21.
 Short-tailed, 34.
 Wilson's, 32, 33.
- Thistle-bird, 132.
- Thrasher, Brown, 181.
- Thrush, Alice's, 193.
 Bell, 191.
 Eastern Hermit, 194.
 Golden-crowned, 170.
 Gray-checked, 193.
 Hermit, 194.
 Migratory, 195.
 Olive-backed, 194.
 Red-breasted, 195.
 Robin, 195.
 Rufus-tailed, 194.
 Solitary, 194.
 Swainson's, 194.
 Tawny, 192.
 Willow, 192, 193.
 Wilson's, 192.
- Thrush, Wood, 191, 192.
- Thunder-pump, 53.
- Tip-up, 74, 76.
- Tip-up, Pond, 74.
- Titmouse, Black-capped, 189.
 Black-fronted, 188.
 Carolina, 189.
 Tufted, 14, 188, 189.
- Titlark, 178.
- Titlark, American, 178.
- Tomtit, 187.
- Towhee, 144.
- Towhee, Arctic, 142, 144.
- Towink, 144.
- Turkey, Wild, 19, 86.
- Turnstone, 15, 82.
- Veery, Rocky Mountain, 192.
- Vireo, Bell's, 155.
 Brotherly Love, 153.
 Blue-headed, 154.
 Philadelphia, 153.
 Red-eyed, 152, 153.
 Solitary, 154.
 Warbling, 16, 153, 154.
 White-eyed, 154, 155.
 Yellow-throated, 11, 16, 154.
- Vulture, Turkey, 19, 90, 91.
- Wake-up, 112.
- Wagtail, 172.
- Wagtail, Golden-crowned, 170.
 Water, 170, 172.
 Wood, 170.
- Walloon, 27.
- Warbler, Autumnal, 163.
 Azure, 162.
 Bay-breasted, 163.
 Black and Red, 178.
 Black and White, 163, 155.
 Black and White Creeping, 155.
 Black and Yellow, 161.
 Blackburnian, 164.
 Black Cap, 163, 176.
 Black-capped Yellow, 177.
 Black-headed, 176.
 Black-throated Blue, 16, 161.
 Black-throated Green, 165.
 Black-throated Ground, 174.
 Black-poll, 163.
 Blue, 162.
 Blue Golden-winged, 157.
 Blue-winged, 157.
 Blue-winged Swamp, 157.
 Blue-winged Yellow, 157.
 Blue Yellow-backed, 160.
 Bonaparte's, 177.
 Canadian, 161, 177.
 Canadian Flycatcher, 177.
 Cape May, 160.
 Cerulean, 11, 162.
 Chestnut-backed Yellow, 169.
 Chestnut-sided, 162.
 Connecticut, 16, 173, 174.
 Fan-tailed, 178.
 Golden Swamp, 156.
 Golden-winged, 157, 158.
 Golden-winged Swamp, 157.
 Gray-headed, 173.
 Green Black-capped, 177.
 Hemlock, 164.
 Hooded, 176.
 Hooded Flycatcher, 176.

- Warbler, Kentucky, 172, 173.
 Kirtland's, 165, 166, 168.
 Macgillivray's, 174.
 Magnolia, 161.
 Mitre'd, 176.
 Mourning, 174.
 Myrtle, 15, 161.
 Nashville, 158.
 Necklaced, 177.
 Orange-crowned, 158.
 Orange-throated, 164.
 Palm, 169.
 Pine, 168.
 Pine Creeping, 168.
 Pine Swamp, 161.
 Prairie, 169.
 Prothonotary, 16, 156.
 Red-poll, 169.
 Selby's, 176.
 Sycamore, 20, 164.
 Tennessee, 159.
 Tie-up, 169.
 Titlark, 169.
 Wagtail, 169.
 Western Parula, 159, 166.
 White-throated, 162.
 Willow, 156.
 Wilson's, 177.
 Worm-eating, 20.
 Yellow, 160.
 Yellow-crowned Wood, 161.
 Yellow Red-poll, 169.
 Yellow-rumped, 161.
 Yellow-tailed, 178.
 Warblers, 13, 16, 23, 190.
 Warblers, Wood, 155.
 Water Kick-up, 170.
 Water-thrush, 16, 22.
 Water-thrush, Grinnell's, 171.
 Large-billed, 172.
 Louisiana, 172.
 New York, 170.
 Small-billed, 170.
 Wyoming, 171.
 Water-witch, 26.
 Waxwing, Black-throated, 150.
 Bohemian, 17, 150, 151.
 Carolina, 151.
 Cedar, 151.
 Northern, 150.
 Waxwings, 150.
 Whip-poor-will, 113.
 Widgeon, 37, 38.
 Widgeon, American, 38.
 Willet, 15.
 Willet, Western, 74.
 Wren, Bewick's, 182, 183.
 Blue, 191.
 Buntz, 185.
 Carolina, 181, 182.
 Golden-crested, 190.
 Golden-crowned, 190.
 Grass, 186.
 Great Carolina, 181.
 House, 183.
 Large Wood, 181.
 Little Log, 185.
 Long-billed Marsh, 185, 186.
 Long-tailed, 183, 191.
 Long-tailed House, 183.
 Mocking, 181.
 Prairie Marsh, 186.
 Ruby-crowned, 190.
 Short-billed Marsh, 11, 185.
 Short-tailed House, 183.
 Winter, 184, 185.
 Western House, 184.
 Wood, 183.
 Wrens, 181.
 Woodcock, 18, 111.
 Woodcock, American, 65.
 Black, 111.
 Woodpecker, Arctic Three-toed, 110.
 Black-backed Three-toed, 110.
 Carolina, 112.
 Downy, 109, 110.
 Golden-winged, 112.
 Hairy, 109, 110.
 Ivory-billed, 19.
 Red-bellied, 112.
 Red-headed, 111.
 Northern Pileated, 111.
 Zebra, 112.
 Yellow-bird, Black-capped, 132.
 Black-winged, 132.
 Summer, 132, 160.
 Yellow-hammer, 112.
 Yellow-legs, 73.
 Big, 72.
 Greater, 72, 73.
 Lesser, 73.
 Little, 73.
 Yellow-throat, Northern, 175.
 Yelper, 72.



SAND DUNE REGION AT MILLERS, INDIANA: LOOKING SOUTH. PHOTOGRAPHED BY MR. F. M. WOODRUFF.



A FAVORITE HAUNT OF MIGRATORY BIRDS IN LINCOLN PARK. PHOTOGRAPHED BY MR. F. M. WOODRUFF.



BONAPARTE'S CATTLE AT MILLERS, INDIANA. PHOTOGRAPHED FROM LIFE BY MR. F. M. WOODRUFF.



BLACK TERN, TWO WEEKS OLD. PHOTOGRAPHED FROM LIFE BY MR. F. M. WOODRUFF.



LAKE MICHIGAN IN WINTER. SHOWING METHOD OF HUNTING THE NORTHERN VARIETIES OF DUCKS IN THE ICE FLOES. PHOTOGRAPHED BY
MR. A. G. PATTERSON.



COLONY OF GREAT BLUE HERONS ON THE DESPLAINES RIVER, TWENTY MILES NORTH OF CHICAGO. PHOTOGRAPHED BY MR. F. M. WOODRUFF.



BELTED PIPING PLOVER, AT MILLERS, INDIANA. PHOTOGRAPHED FROM LIFE BY MR. F. M. WOODRUFF.

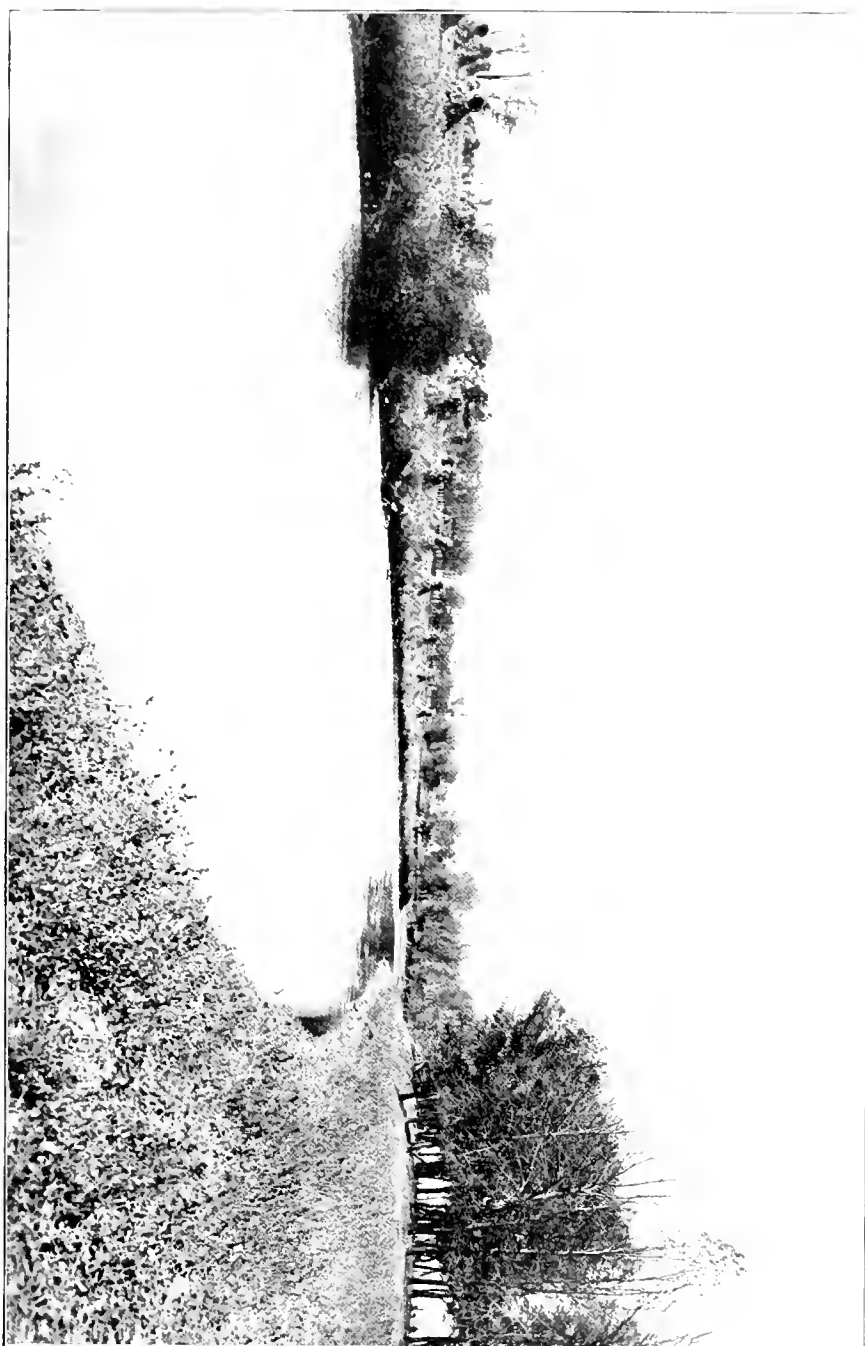


A TYPICAL FALL SCENE IN THE WOODED REGION OF THE CHICAGO AREA. PHOTOGRAPHED
BY MR. FRANK M. WOODRUFF.

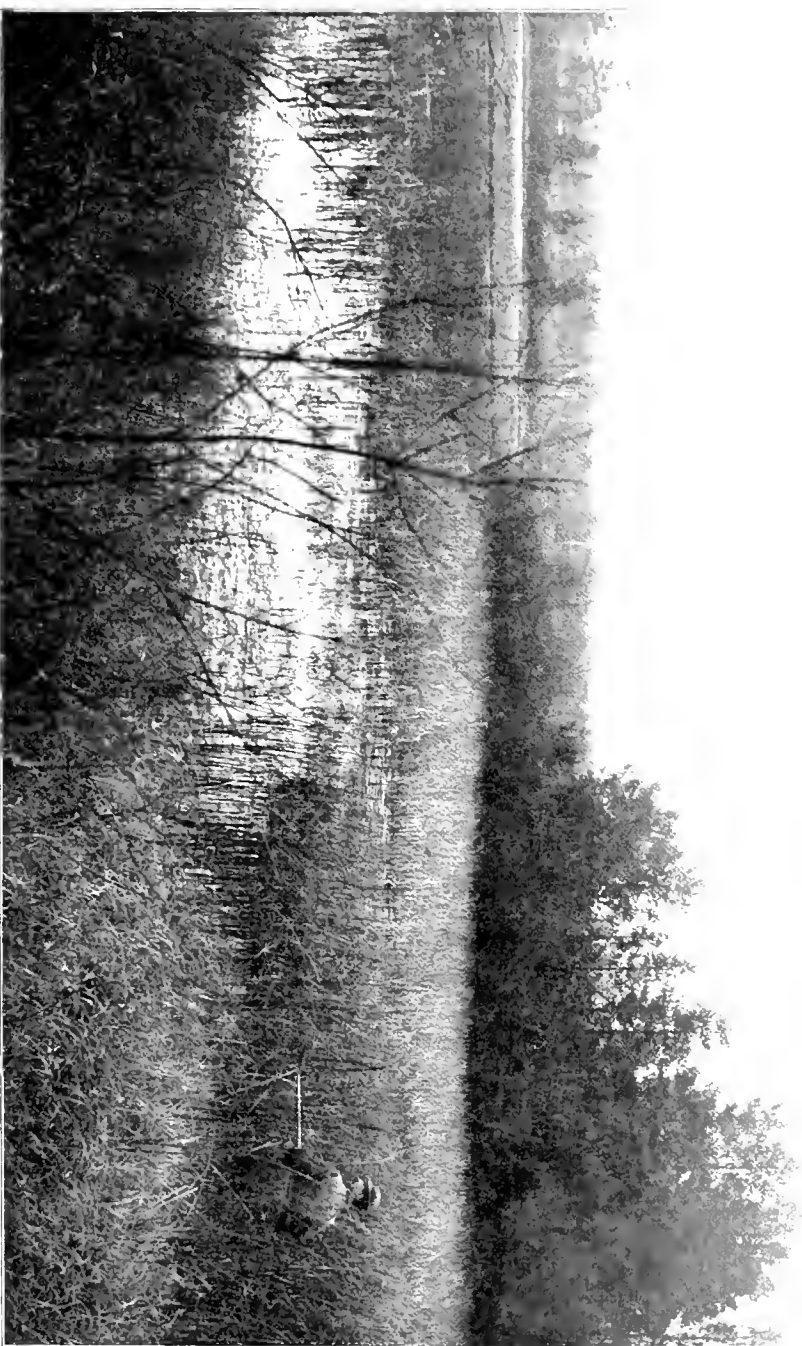
PLATE IX.



A TYPICAL SUMMER SCENE IN THE WOODED REGION OF THE CHICAGO AREA. PHOTOGRAPHED BY MR. T. H. PURPLE.



SCENE ALONG THE DESPLAINES RIVER. PHOTOGRAPHED BY MR. F. M. WOODRUFF.



THE GRAND CALUMET RIVER, AT CALUMET HEIGHTS, INDIANA. PHOTOGRAPHED BY MR. A. C. PATTERSON.

Publications Issued by The Chicago Academy of Sciences.

I. BY THE ACADEMY:

Early Proceedings, Vol. I. Out of print. Pages 1-48.

Transactions, Vol. I. Out of print. Contains:

ART. I. Description of Fossils from the Palæozoic Rocks of the Western States, with illustrations. By Professor J. H. McChesney.

ART. II. On the Climate of the Country Bordering Upon the Great North American Lakes. By Dr. I. A. Lapham.

ART. III. Remarks on the Geology of the Valley of the Mackenzie River, with figures and descriptions of Fossils from that region, in the Museum of the Smithsonian Institution, chiefly collected by the late Robert Kennicott, Esq. By F. B. Meek.

ART. IV. Descriptions of New Subcarboniferous and Coal Measure Fossils, collected upon the Geological Survey of Iowa, together with a notice of new generic characters observed in two species of Brachipods. By Dr. C. A. White and O. H. St. John.

ART. V. Illustrations of North American Birds in the Museum of The Chicago Academy of Sciences. By Dr. William Stimpson.

ART. VI. Biography of Robert Kennicott. By a Committee of The Academy, appointed at the meeting of Nov. 13, 1866.

ART. VII. On the Antiquity of Man in North America. By J. W. Foster, LL.D.

ART. VIII. Descriptions of Certain Stone and Copper Implements Used by the Mound Builders. By J. W. Foster, LL.D.

ART. IX. List of Birds of Alaska, with Biographical Notes. By William H. Dall and H. M. Bannister.

ART. X. On additions to the Bird-Fauna of North America, made by the Scientific Corps of the Russo-American Telegraph Expedition. By S. F. Baird.

ART. XI. A Preliminary List of the Butterflies of Iowa. By Samuel H. Scudder.

Transactions, Vol. II. Out of print. Contains:

ART. I. The North American Lakes Considered as Chronometers of Post-Glacial Time. By Edmund Andrews, A.M., M.D.

Bulletins, Volume I.

No. I. Glacial Markings of Unusual Forms in the Laurentian Hills. By Edmund Andrews, M.D., LL.D. Price, 25 cents.

No. II. Observations of Fluvial Deposits in Peoria Lake, Illinois. By Rev. Joseph D. Wilson. Price, 25 cents.

No. III. List of Batrachia and Reptilia of Illinois. By N. S. Davis, Jr. and F. L. Rice. Price, 25 cents.

No. IV. Report of the Committee on the Microscopic Organisms in the Bowlder Clays of Chicago and Vicinity. By H. A. Johnson, M.D., and B. W. Thomas, F.R.M.S., Committee. Price, 25 cents.

No. V. The Northern Pitcher-Plant, or the Side-Saddle Flower. *Sarracenia purpurea*, L. By William K. Higley. Price, 25 cents.

No. VI. Bowlder Clays. On the Microscopic Structure of Certain Bowlder Clays and the Organisms Contained in Them. By Dr. George M. Dawson, D.S., F.G.S., etc. Price, 25 cents.

No. VII. Some Points on the Micro-Chemistry of Fats. By John H. Long, Sc.D. Price, 25 cents.

No. VIII. Chicago Artesian Wells. On their Structure and Sources of Supply. By Leander Stone, A.M. Price, 25 cents.

No. IX. On Rhizocarps in the Erian (Devonian) Period in America. By Sir William Dawson, LL.D., F.R.S. Price, 25 cents.

No. X. A Paper on *Elephas Primigenius*. By William K. Higley. Price, 25 cents.

Bulletins, Volume II.

No. I. The Flora of Cook County, Illinois, and a part of Lake County, Indiana. By William K. Higley and Charles S. Raddin. Out of print.

No. II. Preliminary Outline of a New Classification of the Family *Muricidæ*. By Frank Collins Baker, Curator. Price, 25 cents.

No. III. The Gross Anatomy of *Limnæa Emarginata* Say, Var. *Mighelsi*, Binney. By Frank Collins Baker, Curator. Price, 25 cents.

No. IV. (1) The Digitations of the Mantle in *Physa*. (2) Description of a New Species of *Limnæa*. By Frank Collins Baker, Curator. Price, 25 cents.

Special Publications:

No. I. Historical Sketch of The Chicago Academy of Sciences (1856-1902). By William Kerr Higley, Secretary of the Academy. Limited distribution.

II. BY THE NATURAL HISTORY SURVEY:

Bulletin No. I. The Lichen-Flora of Chicago and Vicinity. By William Wirt Calkins. Price, 25 cents.

Bulletin No. II. The Pleistocene Features and Deposits of the Chicago Area. By Frank Leverett, U. S. Geol. Survey. Price, 25 cents.

Bulletin No. III. The Mollusca of the Chicago Area. Part I, The *Pelecypoda*. Part II, The *Gastropoda*. By Frank Collins Baker, Curator of The Chicago Academy of Sciences. Price, Part I, 50 cents; Part II, \$1.00.

Bulletin No. IV. The Paleontology of the Niagaran Limestone in the Chicago Area. Part I, The *Crinoidea*. By Stuart Weller of the University of Chicago. Price, 50 cents.

Bulletin No. V. The Mineralogy of the Chicago Area. By Alja Robinson Crook of the Northwestern University. Price, 35 cents.

Bulletin No. VI. The Birds of the Chicago Area. By Frank Morley Woodruff. Price, 75 cents.

In Preparation:

a. Boring Records of Chicago and Vicinity. By Thomas T. Johnston.

b. Paleontology. (Subsequent parts.) By Professor Stuart Weller.

c. *Lepidoptera*. By William L. Tower.

d. *Reptilia* and *Batrachia*. By Dr. Seth E. Meek.

e. *Algæ*. By Professor C. B. Atwell.

f. *Pteridophyta* and *Bryophyta*. By Professor E. J. Hill.

g. Flora of Cook County and Vicinity (*Phænogamia*). By Professor William K. Higley and Charles S. Raddin.

h. *Ethnology* and *Archæology*. By Dr. William A. Phillips.

i. *Fishes*. By Dr. Seth E. Meek.

j. *Noxious Insects*.

k. Composition of the Waters of the Deep Wells of the Chicago Area. By Dr. John H. Long.

l. *Fleshy Fungi*. By Dr. W. S. Moffatt.

m. The Niagara Formation. In charge of Dr. Thomas C. Chamberlin.